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ANNUAL REPORT

OF THE

ARCHÆOLOGICAL SURVEY OF INDIA

FOR THE YEAR

1922-23.

SECTION I.

CONSERVATION.

FROM the Departmental point of view, the most important happening of the year 1922-23 was the reduction in the Government of India's expenditure on Archæology by rupees three lakhs *per annum*. **Introductory.**

The actual effect of the reduction will be to restrict our activities for the next few years very largely to annual repairs and maintenance of monuments already conserved. Special repairs, or new works, will have to be reduced to a minimum, or eliminated, wherever elimination is possible without danger of involving a structure in collapse and ruin. Whether we can avoid the sacrifice of individual monuments remains to be seen, but it is obvious that costly new works will be in any case beyond us, and also that their postponement will mean added expenditure when their turn comes to be taken up later. Our experience in the Great War proved this, for where for reasons of temporary economy approved works were put off which have had to be taken in hand since, it has been found that the cost has greatly increased in the meantime, not only because of the general increase in cost of labour and materials, but also because of the progressive nature of the decay to be rectified. For the present, however, the three lakhs cut is to be effected in any case.

This makes all the more regrettable the fact that of the total sum granted by the Government of India for the conservation of ancient monuments in 1922-23 so large

Introductory. a proportion should have been allowed to lapse. Several causes have converged to this result, potent among them the issue of a circular in connection with the Inchcape Committee ordering all works not of an emergent nature to be held in abeyance so far as possible, pending the issue of the Committee's findings. This led to the postponement of certain archæological projects until too late in the year for them to be taken actively in hand, and a certain amount of money was lost to us in this way. Another reason for the loss was, however, the cumbersomeness of the official procedure in regard to the placing of Imperial grants. The final programme of conservation works for any given year cannot be framed until the final figures of expenditure for the year previous have been received by Archæological Superintendents from the Department of Public Works, and as these returns are seldom in before June or July, and the revised programmes have then to be scrutinised by the Director General of Archæology before the available funds can be distributed between the various Provinces, it is manifest that the allotment of funds before August or September is seldom if ever possible. The allotment, when it is made, goes to the several Secretariats in the form of authority to spend up to the specified limit. for the specified works, and it then remains with the Local Governments to assign the various sums to the local officers of the Public Works Department who are to execute the repairs on behalf of the Central Government. For some reason not known to the writer, this local assignment of funds by the Secretariats takes in some cases a surprising amount of time, with the result that in the year under review some grants reached local officers too late for them to be utilised.

How serious for the Department is the drastic retrenchment ordered by the Inchcape Committee can be seen from the fact that even with the full grants given to us in the past it has proved impossible for us to finance outstanding works. In the Central Provinces I am told the Archæological Superintendent has an accumulated list of thirty-three estimates for approved projects for which funds have not yet been found. The work in Bengal and Assam also requires more liberal provision, while in Burma alone the list of outstanding estimates totals several lakhs.

Departmental funds have been further drained by the heavy charges levied by the Department of Public Works in the several Provinces for their agency in executing repairs on behalf of the Central Government, which at present is not possessed of any instrument of its own for effecting Imperial works of this kind. The charge varies greatly from Province to Province, but 20 per cent. is perhaps a fair average, the percentage being calculated on the gross total of the estimate. That is to say, if the cost of a given piece of archæological conservation is really Rs. 10,000, the Department has to pay close on Rs. 12,000 to get it carried out. When works are executed through Departmental agency, *i.e.*, by officers of the Archæological Department itself, these agency charges are saved. But unfortunately the Archæological Department has neither the personnel nor the plant necessary for effecting its own repairs save in exceptional cases, so that we remain burdened with this heavy expenditure to the Public Works Department. As there is, moreover, a tendency for these agency charges to increase in some cases, this whole question deserves to be gone into. It seems distinctly wrong for nearly if not quite one-fourth of our moneys to be absorbed by the agency of another official department, and when this is conjoined to the reduction of our grants

by way of retrenchment it will be evident that the situation is one calling for somewhat drastic treatment, if our funds are not to be progressively reduced below the point of effective service.

Introductory.

As to the work done in the several Circles during 1922-23, I shall, as in last year's Report, leave the Superintendents to tell their own stories in their own words so far as possible. It is hoped that in this way variety may be introduced into what might otherwise tend to become tediously uniform, and that the Report will gain in interest what it loses in smoothness and unity. We begin as usual with the work done by the Superintendent of Muhammadan and British Monuments in the Northern Circle (Agra office), in the field of conservation, in regard to which Mr. Blakiston* writes :

Northern Circle.

" On the conservation of Muhammadan and British monuments in the Northern Circle, a total sum of Rs. 3,80,329 was expended during 1922-23. The Circle of superintendence extends over three Provinces, and this total is therefore made up of Rs. 1,71,537 spent in the United Provinces (*i.e.*, Rs. 59,036 on Special Repairs *plus* Rs. 1,12,501 on Annual Repairs, including maintenance of gardens) ; Rs. 1,38,090 in the Delhi Province (*i.e.*, Rs. 68,380 on Special and Rs. 69,710 on Annual Repairs and gardens), and Rs. 70,702 in the Punjab, (Rs. 12.135 on Special and Rs. 58,567 on Annual Repairs and maintenance of gardens).

United Provinces.

Sikandarah.

" In the United Provinces ", Mr. Blakiston says, " the principal Special Repair works carried out this year were in Agra or its neighbourhood. In completing the restoration of the East Causeway at Akbar's Tomb, Sikandarah, a sum of Rs. 24.145 was spent. This was a big project, entailing a total cost of Rs. 83,265. and had been in progress since 1921. On account of its architecture and its historical associations, the tomb of Akbar is one of the most important monuments at Agra, and it is obviously desirable to maintain it in as good a condition as possible. It stands in the centre of a spacious walled garden and is approached by four stone terraces or causeways running from the four cardinal points at which are lofty gateways, the southern one being the real entrance and the rest mere false gates. These causeways are perhaps the most interesting feature of the garden. They are some 75 feet wide, and are raised about 6½ feet above the level of the lawn, from which they are approached by flights of stone steps. Where these causeways abut on the main platform of the mausoleum, and down their centres, are large masonry tanks containing fountains, into which the rainwater from the tomb and the platform around it is drained. There are also fish-scale waterfalls at several places on either side of the causeways. These waterfalls, having been originally connected with channels, are so placed as to subdivide the garden, already divided into four quarters by the causeways, into 16ths, then 64ths, etc. Except the one on the south, which provides the main approach to the tomb, these causeways were in a dilapidated condition, having been despoiled of much of their stonework and cut into by modern roadways. The west causeway was restored some years ago, but still requires further repairs, which it is hoped to undertake next year. The causeway under

*During Sir John Marshall's absence on leave, from the middle of March to the middle of December 1923, Mr. J. F. Blakiston has acted as Deputy Director General of Archæology. In this capacity he has rendered me very substantial help in regard to the editing of this Report, especially in the matter of the plates and the Appendices, for which I desire to record my thanks. (*Ed.*).

Northern Circle.
United Provinces.
Sikandarah.

notice, namely the eastern one, with all its tanks, waterfalls, etc., has now been put into a thorough state of repair. The north causeway is unfortunately entirely ruined, and its restoration would be prohibitively costly. The three existing causeways, however, give a sufficient idea of the original arrangement of the garden, and add greatly to the magnificence and grandeur of this majestic tomb of the Great Mughal. In connection with the restoration of the east causeway, repairs were also undertaken to the large well attached to it, and these have also been brought to completion. They consisted in the main of clearing away débris from the passage surrounding the well, and the pointing of its walls, while a considerable amount of stone facing was renewed where necessary. Another work carried out at Akbar's tomb was the reconstruction of a part of its enclosure wall at the south-west corner turret which had fallen down early in the year 1922. In the previous year work was begun on the construction of bridle-paths to the tombs of Itbari Khan, Sadiq Khan and Salabat Khan, but very little was done on them this year, and the work is still unfinished. The eight stone seats for Akbar's and Itimadu-d-daula's tombs, referred to in last year's Report, have now been constructed and set in suitable places in the gardens of these monuments. The construction of a tube well in the compound of the Kanch Mahal at Sikandarah, which was commenced last year, is still in progress. The work, as stated in the previous Report, is being executed by the Sanitary Department, and is designed to supply water for the area outside the main entrance to Akbar's tomb, which it is proposed to lay out and plant with grass and trees when sufficient water becomes available.

Lucknow.

"Among minor works in the United Provinces may be mentioned certain structural repairs to the Chhatar Manzil in Lucknow (a building now used by the United Service Club, who pay a rent of Rs. 3,300 for it), and a few minor repairs to the mosque at Isauli in the District of Sultanpur. This mosque has recently been declared a Protected Monument, and for its preservation it was found necessary to reconstruct the fallen compound wall, to renew the dilapidated roof of the side rooms, and to repair the broken floors. A sum of Rs. 371 was specially sanctioned by the Director General of Archæology for this work."

Isauli.

Gardens.

As regards the gardens in the United Provinces, Mr. Blakiston writes: "The Deputy Director of Gardens in his report draws attention to the arrangements that have had to be made in connection with the separation of the Archæological gardens from those belonging to the Government of the United Provinces. Until the Central Government assumed charge of the former, all the gardens in each separate area had been maintained under one head of accounts, but, with the reorganization, two separate accounts have now to be kept. The staffs of Provincial and Archæological Gardens are now kept entirely separate, but are administered by a headquarters staff in each area consisting of the Gardens Superintendent, his clerical establishment, mechanics, etc. This separation has called for a good deal of extra work on the part of the Local Garden Superintendent, but it is believed that everything is now settled, and that the new arrangements will run smoothly in so far as the Allahabad and Agra areas are concerned. In Lucknow, however, the Agricultural Department, by whom the gardens are administered, has not yet taken over the Archæological Gardens at the Residency and the Nadan Mahal, which are at present cared for by the Nazul

Northern Circle. United Provinces.

Department and the Municipality respectively, but it is hoped that early steps will be taken by the Agricultural Department to assume charge and thereby place all the Archæological gardens under the Deputy Director.

"At the Taj Mahal in Agra the cypress trees flanking the main causeway between the gateway and the mausoleum have been carefully pruned in order to retain their growth within reasonable limits and to reduce the height of some of the trees which had grown too tall and were beginning to hide the tomb. A quantity of young shrubs have been planted to replace losses, and the canna and rose gardens have been renovated, the former now giving a particularly fine display of colour. The cold season flower-beds were quite effective, and the harmonising of colours was much more successful than has been the case for a number of years. The lawns are suffering from neglect in past years and are calling for attention, but it is hoped gradually to relay them in the rainy seasons of the next two or three years. The Khan-i-Alam garden, which is used as a nursery for the Taj and other Archæological gardens in Agra, and had been allowed to get into a somewhat neglected state during the war, is gradually being brought into proper condition, and a quantity of land that had got into disuse has now been brought under cultivation again. The old Mughul garden at Rambagh is also being improved and restored. Numbers of young fruit trees such as mangoes. loquats, alubokhara, plums and papayas have been planted to replace decayed and useless ones, and catch-crops are also planted between the newly planted fruit trees in order to increase revenue. It is gratifying to record that so much has been effected at this garden despite a reduced net cost of maintenance of 33 per cent. owing to retrenchment.

"At Sikandarah a new shrubbery was made in the vicinity of the bungalow, and two straight pathways running north and west from the bungalow were constructed. Some of the winding roadways were demolished and will be grassed during the rains. It is proposed gradually to restore the south-eastern quarter of the enclosed park, which by the way is 90 acres in area, more or less to its original state by constructing pathways at right angles to the central features, according to Mughul principles. Some action is going to be taken during the rains to reduce the number of buck, which have increased in about 12 years from a dozen or so to nearly 200 head, as not only do such a number cause considerable damage but in the hot season they have barely enough to feed on.

"There is little to report in connection with the other gardens at Agra. After certain measures of conservation in connection with the causeways and walls at Itimadu-d-daula's tomb have been completed (works which it is hoped to undertake next year), the improvement of the shrubberies will be taken in hand.

"The Khusru Bagh at Allahabad, which covers an area of 40·70 acres, is partly ornamental and partly productive. Drastic economy has also been enforced at this garden, and though this may have had little effect on the ornamental portion, it has been somewhat seriously felt in the productive area. The gradual encroachment of the Municipal water works upon this garden is much to be deplored, and it would seem that the time has now arrived for the authorities to refuse further extensions."

Miscellaneous Notes.

"The proposals for the separation of the Archæological and Military Areas inside the Agra Fort have received the sanction of the Military Authorities, and it is expected that the scheme will be put in hand during the ensuing year. The Amar Singh Gate will then be opened for visitors, who will gain easy access to the buildings in the fort by payment of a two-anna entrance fee at that gate instead of tramping to the Station Staff Officer's office two miles away and there obtaining passes to enter the fort.

Northern Circle.
United Provinces.

"Mention should be made of the entire refurnishing this year of the little bungalow in the Sikandarah enclosure. With the exception of a few articles, which were either retained or transferred to the Ram Bagh bungalow, everything previously existing has been sold and the proceeds credited to Government.

"The purchasé of the office of the Superintendent, Muhammadan and British Monuments by the Government of India was completed at the beginning of this year, and the building, which is used partly as the office and partly as the residence of the Superintendent, was thoroughly repaired. New doors were erected throughout, and a quantity of pointing and plaster work was executed on the out-buildings."

Delhi Province.

"The programme of Special Works in Delhi", Mr. Blakiston says, "was a fairly long one. The conservation of the Khairu-l Manazil mosque was continued from last year and is still in progress, the chief items so far executed being the removal of earth and débris from both inside and outside the building, and repairs to the dome, the floors, etc. The building stands opposite the Purana Qila, on the Delhi-Muttra road, and is one of the principal mosques of Akbar's time, having been constructed in the year 1561 by Maham Angah, the wet-nurse of that Emperor. Perhaps the most interesting feature of the monument is the double-storeyed chambers on the north, south and east sides of the central courtyard (*vide* Pl. I), which originally served the purpose of a *madrasa* or school. These chambers were almost entirely filled with débris and stood in urgent need of repairs. These have now been carried out and have resulted in a vast improvement to the appearance of the building, despite the fact that portions have fallen and are past repair (Pl. I, fig. *b*). The imposing gateway of the mosque which has received petty repairs more than once during the last decade, is again under repair, a supplementary estimate having been framed for the purpose, as some very ominous cracks had made their appearance.

"At Sher Shah's gateway, immediately to the north of the Khairu-l Manazil, a considerable removal of débris and earth has been effected, exposing a series of arched compartments on either side of the roadway which has been constructed from the Delhi-Muttra road to the gate (Pl. II). This gateway, with its flanking bastions and projecting windows, formed originally one of the entrances to the Delhi of Sher Shah. The clearance of débris and the repairs to the lower portions of the walls which have been effected, together with the repairs just described at the Khairu-l Manazil, have greatly improved the appearance of the site as a whole.

"At Humayun's tomb special repairs were executed to the lower *dalans* along the north-east corner of its enclosure wall. These lower *dalans* are of special interest as they seem to have been coeval and connected with the neighbouring structure locally known as the Chilla of Nizamu-d-din, the famous saint of Delhi the enclosure wall of Humayun's tomb, with its *dalans* and pavilions, having apparently been erected over them at a later date. Their repair had been taken in hand previously but had had to be temporarily stopped, with the result that a portion of the terrace collapsed during a storm.

"At the Khirki Mosque the work of excavation and levelling was continued from last year, dry stone pitching having now been constructed around the sides of the

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Delhi Province.

excavated area to prevent the banks from being cut into runnels by the monsoon rains. Permanent arrangements for the drainage of rain-water from this area could not be made on account of some technical difficulty in regard to the acquisition of the requisite land. This Khirki Mosque, constructed by Juna Shah, prime minister of Firoz Shah (1352-88) is of special interest, I may note, on account of its peculiar plan, there being only one other mosque of this type in Delhi, namely, the Kali Masjid at Nizamu-d-din. Against the general practice in India, and indeed in other Islamic countries also, it has no open courtyard in front of the prayer-chamber, but consists of a big hall with four small open courts at the corners, and is double-storeyed. The lower storey, which contains some hundred cells, was covered with accumulated earth, and rain-water from the neighbouring ground drained into these cells. The latter have now been opened out by excavation, the operation adding much to the grandeur of the building (*vide* Pl. III). Some underpinning, however, still remains to be done in connection with the newly excavated cells.

Tughlaqabad.

"At the Tughlaqabad fort repairs to the road-front were completed last year. This year all that remained to do was to clear away certain huts standing in too close proximity, and to remove certain rubbish from a gateway, works which have now been finished. This gigantic fort, constructed by Ghiyasu-d-din Tughlaq, the founder of the Tughlaq dynasty, between the years 1321 and 1323 A. D., is now almost a complete ruin, quite past repair, save for the wall along the modern road-way which skirts the south side of the fortress. This wall has been conserved by the Archæological Department at various times and in various places, and is now in a fair state of preservation. The fort as a whole, which stands on a low hill, is a half-hexagon in plan, with the long side (extending about a mile and a half) on the south, the whole perimeter being nearly four miles. The walls are built of stone quarried on the spot, are of great thickness and solidity, and are crowned with battlements. They are provided with frequent bastions, pierced with numerous slits and loopholes, and contain vaulted chambers which were used by the soldiers. The fort is supposed to have had not less than 52 gates, but of these only a few are now traceable, two in the south wall having been revealed in the course of the recent repairs. It is doubtful, though, if the fort was ever inhabited. At present it contains only a village of a few huts.

"At Ghiyasu-d-din's tomb, which stands in a fortified enclosure close to the fort of Tughlaqabad, the south-west bastion having collapsed, has recently been in course of reconstruction. It may be of interest to mention that this mausoleum was once known as Daru-l Aman, and that it was constructed by the Emperor himself about the same time that he founded his fort (1321-23 A. D.). It consists of a stronghold which is an irregular pentagon in plan, surrounded by battlemented walls and fortified at the angles by bastions. The tomb proper, containing three graves (one of Ghiyasu-d-din Tughlaq himself, the other of his wife Makhdumai Jahan and the third of his son and successor, the well known Muhammad Shah Tughlaq) stands in the centre of this stronghold, which is connected with the Tughlaqabad fortress by a long causeway carried on some 27 arches, most of which are still intact.

"The repairs to the Zafar Mahal at Mehrauli, commenced last year, were completed. They comprised the removal of débris, replacement of certain roofs by new

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ones, and some petty repairs to the walls, chajjas, floors, etc. The palace is a typical specimen of late Mughal architecture, exhibiting all the shortcomings of that period. The interest attached to it is purely of an historical nature, as it was the residence of the last Mughal Emperors. It stands immediately to the west of the *Dargah* (Tomb) of Qutab Sahib, which was held in great veneration by the Mughals, many of whose family, including no less than 3 crowned kings, lie buried in that vicinity. The palace was originally constructed by Akbar Shah II, but Bahadur Shah, the last Mughal Emperor, after whose *nom-de-plume*, Zafar, it is called Zafar Mahal, was responsible for the reconstruction of its gateway in the year 1268 A. H. (1847-48 A. D.) to permit of the entrance of elephants.

" The approach road to the group of monuments at Hauz Khas, commenced last year, was all but completed. From a narrow pathway it has been widened to ten feet in order to make it fit for the passage of vehicles, and enable visitors to drive conveniently right up to the monuments. The monuments at Hauz Khas include the tomb of Firoz Shah Tughlaq and his *madrasa*, erected on the bank of an old tank, which was originally called *Hauz Alai* after its founder, Alaudin Khilji, and subsequently *Hauz Khas* when Firoz Shah Tughlaq constructed his buildings on its bank, and are of great importance both historically and architecturally, so that this road which has facilitated access to these monuments is sure to attract a great number of visitors to them.

" At Safdar Jang the gardens have now been linked up with the permanent irrigation in the new capital, and it is expected that this operation will result in a great improvement to them. The old pump previously in use has been done away with.

" At Purana Qila also special arrangements have been made for irrigation from the new system recently erected. Another work at this fort was the renewal of a fallen portion of *chajja* at the Sher Mandal, which is a double storeyed pavilion constructed by Sher Shah and subsequently used by the Emperor Humayun as a library. It was on the stairs of this building that the latter Emperor fell and received injuries which resulted in his death.

" At the Delhi Fort gardens improvements have been made in the water-supply by the purchase of the pumping plant which was temporarily installed at the Jumna river for providing water to these gardens on the occasion of the visit of H. R. H. the Duke of Connaught. Among minor works at the fort-palace may be mentioned certain special repairs to the ceiling of the Rang Mahall, which was in a very dangerous condition, and the reducing of the level of a lawn in front of the Mumtaz Mahall.

" At the Chauburji mosque on the Ridge the north-west wall which had collapsed was rebuilt.

" The remaining works of a special nature occurred at the Qutb, and comprised, repairs to one of the wells and to a godown, erection of notices in front of the Dâk Bungalow, and the construction of a new corrugated iron shed for the pumping station, the last work being still in progress.

Gardens.

" The report on the gardens in the Delhi Province was again very unsatisfactory, although the year under review has proved better than the preceding one. The intense heat prior to the monsoon did a great deal of damage, but the following good monsoon

and winter rains were a considerable help towards the replanting of grass and shrubs and bringing the gardens generally to a normal condition.

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Delhi Province.

" At the Qutb great difficulty was experienced in keeping the general flora alive during the hot dry season, and many plants fell victims to the drought. There are three wells in use here, two worked with bullocks and *charsa* and the third with an engine pump, but still the supply of water is inadequate. The water supply at the Qutb presents a very difficult problem, and unless it is solved the maintenance of the garden in a good condition is out of the question. The Superintendent, Horticulture, suggests a scheme for bringing water from a well near Baghi Nazir at Mehrauli, some distance away, by working it with an engine pump; the initial cost of this he estimates at about Rs. 5,000. It is certainly desirable that something should be done and this remedy should be carefully considered.

" At Humayun's tomb also there was a great mortality among the shrubs caused by the excessive heat and unsuitable brackish water from wells. It is, however, proposed to connect this garden with the permanent irrigation scheme in the new capital during the ensuing year, when the difficulties hitherto felt on account of the lack of good water will, it is hoped, be removed. The New Capital unfiltered water has been laid on at Safdar Jang's garden, which is now doing well, and it is hoped to commence the new scheme for the layout there as soon as funds are available.

" At the Purana Qila the grass and trees fared very badly, but this garden is also now connected with the new irrigation scheme, which may improve its condition.

" At Kotla Firoz Shah the supply of water again failed in the only well from which the garden is irrigated. An attempt was made to clear the well and obtain water from a lower depth, but this proved insufficient, resulting in a considerable area of grass being so badly scorched as to necessitate replanting during the rains.

" Thanks to the pumping plant installed at the Jumna on the occasion of H. R. H. the Duke of Connaught's visit and now permanently transferred to the Delhi Fort Gardens, the water supply at the latter was regular and sufficient throughout the year, and the Palace gardens were maintained in a high standard of efficiency."

Punjab.

" In the Punjab," Mr. Blakiston reports, " a total allotment of Rs. 70,435 was given for the conservation of Muhammadan and British Monuments, from which sum at a later date Rs. 3,000 odd was reappropriated for work at Taxila. From the statements received from Superintending Engineers and published in Appendix A, however, it appears, that after deducting the work on Lala Rukh's sarcophagus (Rs. 197) which was executed under the Superintendent's supervision, and the contribution work at the Shahi Mosque at Chiniot (Rs. 913), only Rs. 48,888 (including departmental charges) was expended by the Public Works Department, some Rs. 18,000 being allowed to lapse. This position of affairs is much to be deprecated as the Archæological Department has very limited resources at its disposal and it is essential that so far as possible a stop should be put to the lapsing of such large sums. I would accordingly press upon the Punjab Government the necessity of taking steps to insure that funds when allotted by the Government of India are immediately made available to Executive Engineers, and that

Northern Circle. Punjab.

should these latter for any reason be unable to spend the money, they should at once report the fact to their superior officers and inform the Archæological Superintendent, so that the funds can be reallotted in good time to other works. Besides works of ordinary maintenance and repair, for which Lahore is the greatest centre, and where under this head more than half the total expenditure for the year was utilised, may be mentioned the completion of the repairs to Lala Rukh's sarcophagus under the Superintendent's personal supervision in Agra, and the refixing of it at the tomb at Hasan Abdal. Originally the sarcophagus consisted of a single block of *abri* stone, but it had become badly chipped and broken and has therefore been restored by the insertion of other pieces of the same material, which had to be brought from Jesalmere in Rajputana. The special repairs to Sheikh Chilli's tomb at Thaneswar have also at last been brought to completion; the work this year consisting of renewing a number of missing or broken white marble jali screens around the tomb. Special repairs at Sher Shah's Fort at Rohtas in the Jhelum District are notified as having been finished, with a saving on the estimate of some Rs. 2,200. The works executed here consisted for the most part of minor measures only. This old Fort, which stands on a rocky eminence of a very shaley nature, is in many parts past repairs, as the walls with their foundations have slipped down the hill sides; but there are many features of more than ordinary interest, especially some of the gateways, which deserve to be measured up and drawn out. A short illustrated historical memoir on this stronghold would be of considerable interest.

Hasan Abdal. *Thaneswar.* *Rohtas.*

Lahore.

"The repairs in the Akbari Serai at Shahdara consisted almost entirely of restoring the inlay work on the gateway between the serai and the compound of Jahangir's tomb, while those at the adjoining tomb of Asaf Khan amounted merely to a few finishing touches which brought to completion a work which had been in progress for several years and on which a sum amounting to close on Rs. 40,000 has been expended. It was not found possible by the Superintendent to inspect before the end of the year the conservation works which have been in hand at Hissar, but it is reported that the estimate providing for 'certain improvements to the old Fort buildings and town wall' has now been disposed of, and that works are complete in so far as that estimate is concerned. There remains, however, much to be done at this site, as the clearance of débris has brought to light other defects which will have to be put right before the monument can be said to be in a satisfactory condition. An allotment of funds was given for 'certain improvements to the Lat ki Masjid and to the Jahaz Kothi', also at Hissar, but the provision was made so late in the financial year that the money had to be allowed to lapse, though in respect of the latter monument there seems to be a somewhat unreasonable objection on the part of some irrigation officer to the erection of a fencing around the building, which adjoins the compound of his residence. Funds were also allotted for certain works at Buddhu's tomb and the Gulabi gateway at Lahore; but the money having been received late in the financial year, little or no progress was possible at these two sites.

Hissar.

"The Superintendent of the Archæological Gardens at Lahore reports some progress in the improvement of the garden around the tomb of Jahangir, where he has commenced to widen the flower border along the western wall of the enclosure. The scheme of layout along the western pathway leading to the tomb, *viz.*, alternate cypress trees and flower-beds, has been extended to the north side also, and preparations are being made to lay out

the eastern side in a similar manner. In the Akbari Serai adjoining no special improvements were undertaken, but it has been decided to have rose beds on either side of the roadways, and for this purpose some 3,000 plants have been raised. At Shalimar during the hot season about 100 old mango trees were removed from the lower garden, but even more have yet to be cut down to enable the remainder to have a fair chance of growing properly. It is proposed to have avenues of Amaltas (*carsia fistula*), and to this end young plants have been planted on either side of the side pathways running north and south. The annual *Chiraghan* fair, when about 60 stalls were erected, was a disturbing element to the garden; but other gardens similarly suffer from such fairs. The Taj Mahal at Agra has to put up with some four or five annually, although stalls are not permitted within the actual garden, and the Sikandra garden is utilised for what is known as the Kylash *mela* when stalls are erected and the staff is kept busy cleaning up for at least a week afterwards." **Northern Circle. Punjab.**

For the conservation of Hindu and Buddhist Monuments in the Punjab a grant of Rs. 42,927 including a sum of Rs. 3,729 for P. W. D. departmental charges was sanctioned by the Government of India. Out of this sum, Rs. 27,573 were placed at the disposal of the Director General of Archæology in India for works at Taxila, which comprised current repairs and maintenance of the temporary Museum, Office, etc., special repairs to excavated monuments, arrangements for water supply and the maintenance of a police guard. Out of the balance of Rs. 11,625 a sum of Rs. 1,743 was given to the Superintendent, Hindu and Buddhist Monuments, for further excavations at Rāja Karn Ka Killa near Thanesar, District Karnal, and the results of his operations will be found elsewhere in this report (page 87). The rest of the funds allotted were intended for annual repairs to the protected monuments in the province, and special repairs at Amb in the Shahpur District, Bāghānwāla in the Jhelum District, and a few monuments in the Kangra District. Despite the smallness of the grant for Hindu and Buddhist Monuments, Rs. 5,952 had to be relinquished by the P. W. D. in compliance with instructions received from the Government of India, Finance Department, directing the postponement of such works as had not till then been commenced. Consequently only the allotments for Amb and Bāghānwāla were actually utilized by the Public Works Department.

" The measures of conservation carried out at Amb," Mr. Sahni writes, " were the completion of the construction of the masonry core of the platform on which the main temple stands, and the excavation of the ground around the temple to the original level. *Amb.*

" Bāghānwāla is the name of a small village situated at a distance of about eleven miles from Haranpur Railway Station, or fourteen miles due east of Choa Saidan Shah. About a furlong north of this village, on the top of a precipitous hill of the outer belt of the Salt Range, there stood in ancient times a Hindu fort, of which two semi-circular bastions are still standing on the south face of the hill, with steeply sloping walls made of large blocks of sandstone. The fort is locally known as Nandana, and we are indebted to Mr. W. S. Talbot, author of the Gazetteer of the Jhelum District (published in the *Bāghānwāla.*

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year 1904) for having determined its identity with the Nanduna mentioned in the histories of the invasions of Sultan Mahmud of Ghazni. The Fort of Nanduna figures several times in later history, and early in the 13th century it was held by Kamr-ud-din Khwarizmi. The buildings in the interior have perished except for one large temple and a smaller one at a little distance to the north-east of it. The larger temple is noticed by Mr. Rodgers in his *Revised list of objects of archæological interest in the Punjab*, where he describes it as 'a ruined Buddhist temple, which appears older even than the Katas one.' In reality both these temples, like the temples at Malot, Amb and Katas, were dedicated to Brahmanical deities and are, like them, built in a semi-Kashmirian style of architecture. In the absence of documentary evidence it is impossible precisely to determine their date, but they apparently belong to the same period as the temples of Avantivarman in Kashmir, *i.e.*, the 9th century A. D. The larger temple was a three-storeyed building which closely followed the design of the larger temple at Amb, access to the upper storey being gained by a spiral staircase built in the thickness of the walls. The temple faces west, but the wall on this side has for the most part fallen down and the interior is blocked with débris. The remaining walls, which are standing to a considerable height, are relieved in each storey with corbelled niches which must originally have held images of subsidiary deities. The smaller temple must also have been an imposing structure. Now, however, only the basement and its southern wall have survived.

" In the inspection and conservation notes on the ancient monuments in the Salt Range, Jhelum District, dated the 6th February 1920, the Superintendent, Hindu and Buddhist Monuments, had recommended the declaration of both these temples as Protected Monuments and the clearance of the débris from the larger temple and other repairs. These measures have now been carried out at a cost of Rs. 532.

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" The allotment for conservation works on Hindu and Buddhist Monuments in the United Provinces amounted to Rs. 26,066, out of which works to the extent of Rs. 19,066 were to be undertaken by the Public Works Department, and the rest under the control of the Superintendent. Of the former amount the Public Works Department utilized only Rs. 4,512-5 which was devoted to the conservation of antiquities at Dwarahat, the re-erection of the pillar at Kosam, and repairs to monuments at and near Mahoba.

Bilsar.

" Among the works which were to be carried out under the personal supervision of the Superintendent, the excavation of the Gupta relics at Bilsar, District Etah, had been postponed during the year 1921-22 owing to the objection of the owners of the site to its acquisition by Government. During 1922-23 also the civil authorities failed to acquire the land in question, but they were able to induce the owners to consent to the site being excavated by the Archæological Department. This permission was intimated to the Archæological Superintendent on the 3rd March 1923, and although the time at his disposal was 28 days only, a commencement was made with the work and the results achieved will be found discussed under Exploration (page 93).

Sārnāth.

The measures carried out at Sārnāth comprised repairs to a number of *stūpas* in the forecourt of the Main Shrine, clearance of the area between monasteries III and IV, and the purchase of thirty thousand new bricks of ancient sizes. As stated in last year's report, all old bricks found in the course

of excavation at Sārnāth had been used up in the repairs executed to the Sārnāth monuments, and it was the intention of the Superintendent to secure, in the first instance, a lakh of new bricks of the patterns that were in vogue in the Gupta and mediæval periods. The Executive Engineer, Benares Division, was unable to arrange for the supply of such bricks, and after prolonged negotiation a brick contractor of Benares was persuaded to undertake the work and promised to supply the bricks required by the end of January 1923. This undertaking was, however, not fulfilled, as only thirty thousand bricks were actually supplied up to the last day of the financial year, so that even these bricks could not be utilised for repair work. The only alternative left is for the Archæological Superintendent to try and have such bricks manufactured under his own control, or to approach the United Provinces Government for assistance in the matter."

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Kosam.

It is gratifying to note that the ancient pillar at Kosam, around which Rai Bahadur Daya Ram Sahni had carried out some useful excavations during the previous year, has now been finally re-erected in its original vertical position. "When the work was taken in hand," Mr. Sahni says, "the task seemed a difficult one and the success achieved reflects credit on the Executive Engineer, Allahabad. An interesting piece of work still remains to be done at Kosam, namely, a search for the capital which no doubt originally crowned the pillar. I personally believe that it lies buried to the south of the pillar where it fell centuries ago when the pillar was overthrown, and if we succeed in recovering it, the capital ought in my opinion to be presented to the Indian Museum, Calcutta, which is already in possession of the two beautiful capitals excavated at Rampurva in the Champaran District. The ancient history of the pillar unfortunately remains somewhat obscure. Its entire surface from top to bottom all round has been examined for the first time by me, and absolutely no writing of Asoka's time has been traced on it. Still there seems to be no doubt as to its having been a work of that Emperor. This is sufficiently clear from the fact that it bore the same high polish as characterises the other pillars erected by Asoka. The fact that Yüan Chwang makes no mention of any Asoka pillars in his account of Kian-shang-mi, or Kauśāmbī, offers no serious difficulty, because does he not similarly ignore in his itinerary the edict pillar of Asoka at Sārnāth? The great monolith in the Allahabad Fort is rightly believed to have been brought to Allahabad from Kaśuāmbī, as one of the inscriptions on it is definitely addressed by the Emperor Asoka to the rulers of Kauśāmbī. If this assumption is correct, the absence of any inscriptions of Asoka on the existing pillar at Kosam is easily explained. The same thing happened at Rampurva in the Champaran District, for of the two Asoka pillars at that place, only one contains a version of the six pillar edicts, the other column having been left without any writing. The exact date of the downfall of the pillar is not precisely ascertainable. At present it is only possible to state that, as suggested by General Cunningham, it was still standing upright in its original position when the inscription of six lines in characters of the 7th century A. D. was engraved upon it.

Dwarahat.

"During 1922-23," Mr. Sahni says, "a sum of Rs. 1,418 was expended on the conservation of the Kacheri group of temples at Dwarahat in the Almora District. But before describing the nature of the work done it appears necessary to insert here some general

observations about the antiquities of the place and the work carried out at some of the temples here by the Public Works Department in previous years.

"The earliest account of the monuments of Dwarahat by a European is that given by Mr. Atkinson.* Dwarahat in former days was the residence of an important branch of the Katyuri Rajas. The palace of these Rajas was built on the rock called Tharp, on the Chandragiri hill. The ancient temples which have survived at this place are eight in number and they are locally known as (1) the Kacheri Deval, Pl. VI, figs. *a* and *c*, (2) Gujardeo temple, (3) Maniyan group, Pl. VI, fig. *b*, (4) Ratandeo shrines, Pl. VI, fig. *d*, (5) Badrinath group, (6) Mrityunjaya group, (7) Bandeo temple, and (8) Kutumbari shrine. All these temples were desecrated by the Rohillas during their invasion of this part of Kumaon, and they are no longer used for worship except the Badrinath temple. They are all built in the North Indian or Indo-Aryan style of architecture and are of plain construction with the exception of No. 2 which is elaborately carved. Mr. Atkinson on the authority of a fragmentary inscription engraved on a Navagraha slab which is dated in the Saka year 1103 (not 1105 as read by Mr. Atkinson) and is now kept in the temple on the Dunagiri hill, assigns all the principal temples of Dwarahat to the early part of the 11th century A. D. This view does not seem to be entirely correct, as at least one or two of the temples, and especially the Ratandeo group, must be about three hundred years later in date. Similarly, Pandit Ramadatta, who assisted Mr. Atkinson in his researches in connection with the history of Kumaon, informs us in his Hindi *Vamsavali* that the temple of Badrinath at Dwarahat was erected by Raja Sadhuvaradeva in Samvat 1240 (A. D. 1184), *i.e.*, the end of the 12th century A. D.

"These temples were inspected by Mr. Hargreaves in 1913 when he drew up an excellent Conservation Note setting forth detailed recommendations for their preservation. The first estimate for these works amounted to Rs. 4,772, but on account of increase in prices of material and labour it had to be revised and then amounted to Rs. 6,070. During this interval some useful preliminary work was carried out by the Public Works Department at the Gujardeo temple, the Maniyan group, the Ratandeo shrines and the Mrityunjaya temples. In the year 1922 the estimate underwent a further revision and now amounts to Rs. 13,780. The subjoined notes embody a summary of the work carried out at the several temples and a few new facts about their character which came to light on my inspection.

"The seven shrines comprised in the Maniyan group are divisible into three independent temples, shrines Nos. 3 to 7 having belonged to one and the same temple. Temple No. 1 consists of a *mandapa* hall with a row of three shrines at the back, and must have been dedicated to the Hindu Trinity, *i.e.*, Brahma, Vishnu and Siva. The northernmost shrine, which bears on its lintel representations of the ten incarnations of Vishnu, may have contained an image of that deity. The temple of Ratandeo at Dwarahat was also dedicated to the same three deities, and one of the temples at Babbaur (*ancient* Babbapura) in the Jammu State has exactly the same plan as the temple being described. The site occupied by shrines 3 to 7 of this group was excavated by the P. W. D. and reveals

*See his *Himalayan Districts of the North-Western Provinces of India*, Volume III, p. 221 *ff.*

the interesting fact that all these shrines together constitute a single temple with a common courtyard in the centre. The site is now found to be surrounded by a stone wall provided with a flight of stone steps on the north side. It is also evident that as the lintels of at least three of the shrines contain figures of Jain Tirthankaras, the temple must have been dedicated to one or other of the Jain patriarchs. Shrines Nos. 4 and 7 are moreover lined on the inside with continuous rows of stone pedestals for the reception of Jain images. Further measures carried out on this Jain temple included the excavation of the lower part of shrine No. 3 and the cutting down of the large tree which hid shrines Nos. 5 and 6.

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" The Ratandeo temple originally comprised nine shrines ranged on the east, south and west sides of an open courtyard, and was entered from the north. As was hinted above, this temple must have been dedicated to the gods Brahma, Vishnu and Siva, and there are indications to show that the three shrines on the south side of the quadrangle contained images of these three gods. The subsidiary shrines must have contained images of other Brahmanical deities, but none of them are now extant. The shrines on the south side had a common portico supported on two rows of free standing pillars. All the pillars of the front row and the end ones of the other row have disappeared and have not been found anywhere in the village. The courtyard in the middle has now been excavated and is found to be paved with stone slabs. Mr. Hargreaves suspected the existence of an outer wall all round the site, but it has not yet been traced anywhere.

" The Gujardeo temple stands on a large stone terrace and faces towards the west. The cella, which measures about 7 feet square internally, has a star-shaped plan like the temple of Balisvara at Champavat, and preserves the original construction up to a height of 10 feet only. The portions above this level are a promiscuous restoration of old material. Among the sculptures which adorned the exterior of the cella the most noteworthy are the images of Brahma, Mahesa and Vishnu carved in the centre of the north, east and south sides respectively. The lintel of the entrance, which also seems to be *in situ*, is carved with figures of the seven goddesses. Of the *mandapa* no portions whatever have survived. The main question in the conservation of this temple relates to the advisability or otherwise of retaining the upper structure of the cella which has been built up in modern times with odd pieces which lay scattered round about the site. For the present it has been decided to let it stand as it is. The plinth of the temple has been excavated to the original ground level, and an area about 12 feet in width cleared of débris on all sides of the temple. What is now wanted is a small drain to carry away rain water from the temple precinct.

" At the Mrityunjaya temple some excavation has been carried out around the principal shrines, but a great deal of work remains to be done.

" The greater part of the amount expended at Dwarahat during the year 1922-23 was devoted to the conservation of the Kacheri group of temples which is practically completed (Pl. VI, figs. *a* and *c*). On this site there were as many as twelve shrines visible above the ground. They lie in two rows on the same level, with the exception of shrines Nos. 1 and 2 which stand on a separate higher plinth. Five of these temples (Nos. 6 to 10) were preceded by a common portico and were dedicated alternately to Siva and

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Vishnu. This fact is easily ascertained from the existence of an outlet for sacrificial water (*Somasutra*) which has to be provided in a *linga* shrine, and from the style of the pedestal against the back wall which must of necessity stand for the image of Vishnu. The other shrines were also dedicated to the same deities.

"All the principal items of conservation here have been duly completed. The most important measure was the construction of a dry stone wall on all sides of the site. This was necessary to keep off cattle from entering and soiling the shrines. The area in front of shrines Nos. 1 and 2 has been levelled and terraced, the edges being protected with well-built dry stone retaining walls constructed in accordance with the instructions contained in sections 113 and 114 of Sir John Marshall's *Conservation Manual.* An equally useful improvement was the excavation of the large open space in the middle of the site. It is now found that the original level of this courtyard lay two feet below the visible surface. This operation has brought to light five mouldings at the bases of some of the temples, and has also revealed several new structures. One of these is a double shrine situated to the north of shrine No. 12. The area immediately in front of shrine No. 5 was originally occupied by a rectangular room 27 feet by 7½ feet of which the mere foundations now remain. The foundation of yet another shrine has been exposed to the north of shrine No. 3, while between it and shrine No. 10 has been found a solidly built well five feet in diameter. The well has been cleared down to the water level and yielded several fragmentary sculptures which must have been thrown into it when the temple was destroyed by the Rohillas. The rest of the work carried out included the removal of trees and the replacing of missing stones, some of which were recovered from the fields and private dwellings."

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Mr. Hargreaves writes from the Peshawar office as follows: "The free-standing monuments of the Frontier are comparatively few in number, and except five, namely, the Stone Circle at Asota, the Asoka Rock Edicts at Shahbazgarhi and Mansehra, and the two Kafir Kots in the Dera Ismail Khan District, are all assignable to the Kushan period, when, being the centre of a large and powerful kingdom, this region enjoyed, what has unhappily been so rarely its portion, a prolonged period of peace.

"The monuments of Kushan date fall into two principal groups, one a series of Buddhist establishments in the low hills which lie in a radius of some ten miles round Mardan in the Peshawar District, the other in the Hazara District in the northern section of the Taxila area.

"Attention has been concentrated this year on those in the Peshawar District. In the programme of works, conservation was to have been undertaken at Takht-i-Bahi, Tareli, Shahbazgarhi, Kashmir Smas and Jamalgarhi. At the first four the work was to have been carried out by the Public Works Department, and at Jamalgarhi by the Superintendent. A grant of Rs. 8,876 was placed by the Government of India at the disposal of the Superintendent for conservation and maintenance of monuments, and of this sum Rs. 8,780-0-8 was expended, as well as Rs. 3,233-4-0 from the special grant for excavation.

"Rupees 6,942 were allotted to the Public Works Department for the execution of the works under its control, but of this sum only Rs. 4,279 were expended, as of the proposed

four works only two were undertaken. The Garrison Engineer, Mardan, who was the officer entrusted with this work, appears to have been under the impression that archæological works were a charge unfairly imposed upon him, as is evidenced by the following note written by him when making over charge of his sub-division, and a copy of which was forwarded to the Superintendent by the Assistant Commanding Royal Engineer, Nowshera :—

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> "We are called upon yearly to carry out conservation works for the Superintendent, Archæological Survey. I have found these works to make an unfair demand on the time of my staff owing to their out-of-way situates (*sic*) and the accuracy of detail required in copying old masonry, etc."

It required constant pressure from my side and very frequent personal inspection of the work to induce the Garrison Engineer to complete even two of the four works entrusted to him, and to obtain even this it was necessary quite early to abandon the idea of improving the path to the Tareli monuments. In consequence conservation was carried out by the Public Works Department at Shahbazgarhi and Takht-i-Bahi only.

Shahbazgarhi.

"About nine miles east-north-east of Mardan in the Peshawar District lies the village of Shahbazgarhi, the Po-lu-sha of the Chinese pilgrims. In the time of Song-yun and Hiuan Tsang it was a place of pilgrimage, being identified as the scene of the penultimate existence of the Buddha, when, born as Prince Visvantara, he realized the perfection of charity. Numerous religious monuments then marked the various sites where Visvantara had given such heroic proofs of his generosity. Of these monuments a few now hardly traceable foundations on the Mekha-Sanda Hill to the north-east of the village alone remain to mark the retreat of the exiled prince, and to-day the interest of Shahbazgarhi lies in the fourteen rock edicts of Asoka carved on two rocks near the foot of a small hill which lies about three quarters of a mile south-east of the village.

"As the Visvantara legend could not have been located here in 258-57 B. C. when, in the 14th regnal year of Asoka, these inscriptions were published, their position is, in all probability, due to the fact that the site lay on the ancient highroad to India. The old road from the Khyber to Taxila was by way of Peshawar, Charsada, Mardan, Shahbazgarhi, Swabi, Hund and thence across the Indus. While the present modern road runs to the north of the inscriptions, the ancient road ran more to the south, due east from Mardan to Garhi Kapura 1½ miles south of the inscriptions. It is on this account that the Shahbazgarhi inscriptions were once known as the Kapur-di-Giri inscriptions, Kapur-di-Giri being the Hindu name for the village of Garhi Kapura.

"Thirteen of the edicts are inscribed on two faces of the larger rock which stands a little above the foot of the hill, the XIIth Edict is carved on a smaller rock which lies about 70 yards to the north-west of the larger and at the foot of the hill.

"The larger rock is inscribed on two faces, Edicts I-XI facing the hill and Edicts XIII-XIV facing the plain. The existence of the larger inscription was first brought to notice in 1836 by M. Court of Maharaja Ranjit Singh's service, but the smaller rock bearing the XIIth Edict was discovered by Captain (afterwards Sir Harold) Deane when Assistant Commissioner, Mardan.

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"When I inspected these inscriptions in December 1921 I found contractors quarrying for stone in close proximity to the larger rock, while one rock actually contiguous with it had been removed at no very distant period to be broken up for road metal. It was obvious that some form of protection was needed, something to mark off and distinguish this inscribed rock from its numerous uninscribed counterparts which dot the hill-side. The smaller rock had indeed some protection, being surrounded by a very dilapidated and ineffective walled enclosure (Pl. VII, fig. *a*). Something more in keeping with these important records of imperial endeavour was felt to be needed. Round the upper rock, which is uncomfortably perched on a very steep slope covered with loose gravel, a stone platform has been built to give easy access to the inscribed faces, the slope being reduced by the provision of steps at the north end.

"At the smaller rock the former unsightly enclosure wall has been demolished, the ground cleared, and a low breast wall of neat masonry, not too high to prevent the inscription from being seen from outside, has been erected. To give access to the enclosure steps have been provided on the west (Pl. VII, fig. *b*). The work on the whole has been very satisfactorily executed, but the slope of the stone platform on the northern face of the upper rock has been made steeper than was sanctioned in the estimate. A note on the inscriptions giving a brief account of the Asoka Rock Edicts in general, particulars of the discovery of the Shahbazgarhi inscriptions, and a brief summary of the fourteen edicts, has been printed and will be erected near the rocks for the information of visitors. The cost of these conservation measures was Rs. 2,793.

Takht-i-Bahi.

"Perhaps the best known monument in the Peshawar District is the Buddhist monastery of Takht-i-Bahi situated about 10 miles north-west of Mardan. It has frequently in the past been the object of excavation and yielded numerous sculptures of surpassing excellence. A plan of the site was published in the Annual Report of the Superintendent, Frontier Circle, for 1911-12, and it is by reference to the numbers therein given to the various structures that the present operations are detailed. The work undertaken consisted in the replacement of the unsuitable iron lintels in the chapels in Court VI by stone lintels, improving the path to the monument, strengthening and repointing the unsightly modern buttresses in Court XX and underpinning the building on the south of Court XIX. The cost of the work was Rs. 1,117. The preparation of estimates for the conservation of such a monument presents many difficulties and the work in question was beyond the power of the officer to whom it was entrusted. In future, work at this site should be carried out departmentally. Situated some 500 feet above the plain and accessible by a somewhat rough path necessitating a stiff climb, the monument failed to receive that close supervision by a responsible officer which is so essential in the case of archæological monuments. Considerable clearance and conservation are still required at this site, but should be undertaken only when the Superintendent can give the work close and continuous supervision.

"On the occasion of an inspection I obtained an interesting piece of Gandhara sculpture which had been found by a labourer, while in search of stone for repairs, on

the summit of a spur to the west of the main monument (Pl. X, fig. *a*). It is unfortunately somewhat damaged, but the lower relief is one of the few known representations of the shaving of the head of Nanda preparatory to his ordination, and the upper scene in all probability depicts the Buddha drawing away Nanda from his newly-wedded wife by giving him his alms bowl. The right hands of both the Buddha and Nanda are unhappily missing. It will be noticed that both Nanda and his spouse have the nimbus which, at first sight, might seem to militate against this identification, but it must not be forgotten that on the reliefs the nimbus is shared not only by the Buddha and the Bodhisattvas but by the gods (one of whom is seen in the upper left of the panel), demi-gods, and kings, and Nanda was himself a prince of the Sākyas.

"About 21 miles north-east of Mardan and in the Paja range lies the cave known as the Kashmir Smas. From this natural cave which contains, however, some structural remains, were recovered certain interesting carved wooden panels and small columns, now in the British Museum. A complete clearance and examination of this cave is most desirable, but before this can be carried out it is imperative that the immediate approach to the cave, which is dangerously steep, should be improved. Many would-be visitors have been deterred by the precipitous nature of the last fifty feet of the ascent.

"The Garrison Engineer, Mardan, inspected the site and drew up an estimate for improving the dangerous piece of the path. This was countersigned and funds placed at the disposal of the Assistant Commanding Royal Engineer, Nowshera. Despite constant enquiries no information could be obtained when the work would be started, but finally the Garrison Engineer stated that it would be put in hand about the 25th January 1923. The work was however continually postponed and finally this officer retired in February 1923 without attempting to carry out the work. His successor, notwithstanding his utmost endeavours, was unable to undertake the work in the short time at his disposal, for a heavy fall of snow late in the year then rendered it impossible to get workmen or material to the site.

Jamalgarhi.

"Conservation of the Buddhist establishment of Jamalgarhi, which lies some ten miles due north of Mardan, was undertaken departmentally and carried out by me personally. The site has been the object of exploitation at irregular intervals for many years, beginning with the unknown colonel who, some sixty years ago, carried away twelve camel loads of sculptures, and followed by excavation in 1873 by Lieutenant Crompton, R.E. The latter operations were directed principally to recovering sculptures of which a very large number were obtained and now form part of the collections of the British Museum and the Indian Museum, Calcutta. The monument was brought under the operation of the Ancient Monuments Preservation Act in August 1920, and since that date has received continuous attention. In 1873 the spoil earth had been thrown down without foresight in close proximity to walls, sometimes even over buildings, and often with lamentable results as a consequence of its interference with the drainage of the site. Clearance, the primary need of the site, was started in 1920-21, and continued along with some conservation in 1921-22. The steps uncovered in the process of clearance and the material requiring to be removed are well illustrated in Pl. IX. The south wall of Courtyard 7, before and after clearance and, later, after conservation, is shown in Pl. IX, figs. *a*, *b* and *c*.

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"For clearance, abundant if somewhat expensive labour, was obtainable locally, but local masons sufficiently skilled to be able to copy the characteristic diaper masonry and intelligent enough to realize the special requirements of archæological conservation are very few in number. It was, therefore, decided to import skilled labour from the Taxila area where in the previous year I had trained a number of masons in connection with conservation of the Jaulian monastery.

"The work of clearance was started on November 16th, 1922, and conservation four days later. The actual supervision of the work was entrusted to the office draftsman. B. Muhammad Sharif, who resided at the village of Jamalgarhi about one mile south of the monument, and carried out the instructions given to him by the Superintendent who visited the site ten times during the operations. The draftsman not only supervised the work with intelligence but also completed the plan of the site, a portion of which is published in this report.

"Clearance was undertaken east and west of No. 5, in Courtyard 7, south-east of No. 9, east and south of No. 10, north-west of No. 17, south-east of No. 19, north of No. 23, north-east and west of No. 24, and north of No. 35. The area north of No. 36 was levelled and seven sunk water pots in fair preservation and still *in situ* were recovered. The courtyard to the south-west of No. 41 was cleared as also the surroundings of No. 43 and No. 45. The débris was removed from the west of No. 47 and No. 48, and search was made on the north of No. 50 for sunk water pots and three were found. All the water pots have been left in position. In this clearance particular care was taken to deposit spoil earth in suitable spots, and clear of all buildings. Useful material was collected for future conservation.

"Of the main stupa, the centre and *raison d'être* of Jamalgarhi. only the base remains. At some early period this base had been enlarged either to strengthen the stupa or to allow for additional ornamentation. At the same time the procession path was raised three inches. The original path was of diaper masonry, the later pavement of blue slate slabs, and it was in this later pavement that coins, including the coin of Vasudeva, referred to in last year's report, were inset. This addition to the stupa base is a ring of masonry 1′ 5″ in thickness and 1′ 10″ in height, and the stucco Buddha figures which ornamented the stupa drum, and traces of which still exist, are not earlier in date than this enlargement. No attempt has been made to restore the missing parts of this addition, but existing portions have been secured, and the inner circle of masonry of the original stupa has been built up approximately to the height of the highest existing portion. The depression in the centre of the stupa, the result of endeavours to obtain relics, has been filled in with earth and the surface grassed.

"The Main Stupa (No. 1) is encircled by numerous chapels. The backs of these were much ruined and these have been rebuilt to two courses above the cornice (Pl. IX). Inside, and facing the procession path, the fronts of the chapels have been restored, where necessary, to a height of 2′ 9″ to 3′. In all cases the old technique has been followed.

"The heaviest and most extensive work was the high revetment of No. 10, the Conference Hall. Here not only had the south-east corner fallen, but most of the infilling of carefully laid small stones, which correct the irregularities of the larger blocks and which is so characteristic a feature of the diaper masonry, had disappeared from the existing portions of the walls. These flat stones, designated by the masons *chappar*, require very careful fitting and where necessary, these have been set in lime mortar, but this has always been recessed and is invisible. The top of the eastern wall was rendered water-tight and secured by adding one more course laid in cement, and the north-east corner was repaired and the missing *chappars* restored. The northern wall was similarly treated. The condition of the west wall of the Conference Hall before clearance and after conservation will be seen from figs. *c* and *d* of Plate IX which show this wall as part of the eastern boundary of Courtyard No. 7. The four steps which gave access to the Conference Hall have been restored.

"The west wall of No. 11, which lies to the north of No. 10, was repaired and strengthened by the replacement of the missing *chappars*.

"East of No. 10 is the large Courtyard No. 7, the southern boundary wall of which (Pl. XI) is in alignment with the south wall of No. 10 with which it is also co-eval. The upper portion of this wall was much decayed, part was dangerously out of plumb and at the eastern end was a large gap through which for the last forty years had flowed the drainage of the courtyard and the extensive area to the north. To control this drainage it was decided to build up the southern wall to a height of some three feet above the inner level of the courtyard and to make drains to carry off rain water to the south. Before the wall was sufficiently high to permit the making of these drains, unusually heavy and prolonged rain on February 7th, 1923, so damaged a portion of the wall under repairs that 21 feet had to be dismantled and rebuilt. It was then discovered that the foundation of the original wall was weaker than had been anticipated, and in the rebuilding it was widened and strengthened. It is believed that the difficult question of the drainage of this area has now been solved. At the western end of this wall the steps by which the courtyard was originally reached have been repaired, as well as its flanking wall.

"At Jamalgarhi there is no monastery of the usual type with cells around a central courtyard (*chatuh-sālā*), and the monks lived in numerous small detached buildings scattered over the site. A typical example of one of these structures is No. 35. This is 48′ 2″ in length and has three rooms in line faced by a long narrow verandah on the south. It was double storied, the staircase being external and at the north-east corner. Immediately behind the north wall are two sunk water-pots and a rectangular masonry tank 4′ × 2′ 10″, presumably also for storing water. Conservation here consisted of restoring missing *chappars*, dismantling and rebuilding a dangerously overhanging portion of the north wall, straightening displaced stones at the doorways and windows, replacing a broken lintel of the eastern niche of the verandah platform, repairing the steps and securing the tops of all walls.

Frontier Circle.

North-West Frontier Province.

"The question of drainage of these ancient and roofless structures is one of primary importance, and every precaution has been taken to guard against the monument suffering damage until operations can be restarted next working season. In No. 50, a small drain had to be made through the base of the eastern wall to prevent ponding of water inside the building.

"The total cost of excavation and conservation was Rs. 8,842-8-0."

Western Circle.

Bombay Presidency.

The following account of conservation in the Western Circle this year has been prepared by Mr. G. C. Chandra, as Mr. R. D. Banerji, the Superintendent, is absent on leave :—

"Despite the curtailed conservation grant, the activities of the Western Circle, which have hitherto received continuous encouragement and support from His Excellency the Governor of Bombay, have continued uninterruptedly. It seems imperative that the work of conservation and maintenance of Protected Monuments should continue, at least for some years, at this same pace. if all the monuments that lie scattered over the province are to be duly attended to, and kept in a state of permanent good repair. The conservation grant for the Presidency including Sindh was reduced to rupees one lakh and four thousand, as against one lakh and ten thousand for the last year. Out of this sum, Rs. 22,627 were placed at the disposal of the Superintendent for continuing works under his direct control, *viz.*, (1) excavation of the Caves at Elephanta, (2) special repairs to the Portuguese Remains in the fort at Bassein, and (3) excavations at Mohenjo-daro in Sindh. Owing to lack of funds, three other works which were also under the direct charge of the Superintendent last year, *viz.*, (1) conservation of the Faria Bagh water-palace at Ahmednagar, (2) excavation for ancient remains of the Nizamshahi kings in the fort at Ahmednagar, and (3) excavations and special repairs to the Peshwa's palace, Shanwar Wada in Poona City, could not be taken up during the year. The balance of Rs. 81,373 was allotted to the Public Works Department both for special repairs, and current repairs and maintenance to monuments under their charge. The total amount of agency charges for current and special repairs carried out by the P. W. D. came to Rs. 19,674. The total expenditure on conservation during the year, excluding agency charges, amounted to Rs. 81,435, and of this sum Rs. 48,718 were spent on special repairs, and Rs. 32,717 for current repairs and maintenance. (*Vide* Appendix A).

Elephanta.

"At Elephanta, six more caves were exposed to view and made fully accessible to the public by the removal of huge accumulations of stones and débris lying in front of them: their greater portion having been cleared last year (Pl. XII). Proper pathways to them, started then, were for the most part completed, and at the instance of Sir John Marshall a similar pathway was extended up to the front of another cave in continuation of Cave No. 4. In this case, the cave in question has been placed within easy reach simply by cutting a passage through the large heap of earth and stones aligned along the entire façade. The completion of all the works recommended in the conservation notes of this Department will no doubt take some years, but the diversion of rain water, which at present falls over the façades of all the caves, is a work of paramount necessity. Accordingly steps are being taken to construct training walls over the front of Cave No. 1,

like those existing over the caves at Nasik and Bedsa. Rs. 4,280 were spent in carrying out the above works.

Western Circle.
Bombay Presidency.

Bassein.

" Of the ten different buildings taken up for conservation at Bassein during the year. particular attention was devoted to cutting down and removing trees, chiefly pipal and banian, from the tops and sides of walls of the following monuments, *viz.*, (1) San Franciscan Church and Monastery, (2) Church of Nosa Sanhora Davida and the adjoining citadel, (3) Dominican Church and Convent, (4) St. Paul's Church (Pl. XIV. figs. *c* and *d*). The roots of such trees as could not be taken out from the masonry joints even by chiselling, were treated, as an experimental measure, with a mixture of asaphœtida, shell lime and country *gur* (molasses), and have not shown signs of further sprouting. Since the year 1917, considerable improvements have been effected at this site, and the monuments have at last begun to attract visitors (Pl. XI. figs. *d* and *e*). These works were carried out at an expense of Rs. 7,183. Detailed conservation notes for the preservation of the remains exposed to view have been drawn up, and will be submitted to the Director-General of Archæology as soon as the sketches are ready.

Poona.

" Though, as stated above, no excavations or special repairs were undertaken at the Shanwar Wada, the removal of modern unsightly court buildings standing on the original plinth of the palace, and proper grassing of lawns which had already been laid out—necessitating the employment of a mali—in advance of the visit of H. R. H. the Prince of Wales in November 1921, added greatly to the interest of the Peshwa's palace (Pl. XIII), and the public are now daily pouring in in larger numbers. The police guard maintained here at the cost of this Department was removed by Government at our instance, as after the removal of the Small Cause Court it was no longer considered necessary. It is gratifying to note here that the Poona City Municipality have kindly agreed to a free water-supply for the maintenance of the terraced gardens inside the Shanwar Wada. The charges for current repairs and maintenance, including the purchase of necessary gardening implements, amounted to Rs. 1,735.

Ahmednagar.

" No further excavations inside the Ahmednagar fort were undertaken during the year. Proposals for the final treatment of the remains so far discovered were submitted to the Military authorities for approval, but were returned to this Office with certain modifications which have since been embodied in the sketch plan under preparation and will have to be forwarded again to the Military authorities for approval before we start the work next year.

Dholka.

" Close upon the extensive tank adjoining and facing the Dholka Railway Station stands majestically even without its façade of three arches, the Khan Masjid at Dholka. There were originally two open chhattris on top of the two huge pylons at the ends of the front façade of this mosque. The one to the right disappeared long ago, but the remaining half of the other to the left attracted the attention of Mr. J. A. Page, then Assistant Superintendent of this Circle, who suggested certain measures for its preservation. After certain modifications these were put in hand last year and the work has now been completed. A rough skeleton of the missing parts of the chhattri, without details, having now been restored. Gaps and cracks over the surfaces of the three domes of the masjid, and one over the entrance porch were filled in with old bricks and

Western Circle. Bombay Presidency.

lime mortar, and made water-tight. The half-broken and decayed *kanguras* of the gateway were also repaired. The iron-barred door to the masjid was removed. A portion of the wall inside, which had cracked very badly and had gone out of plumb, was dismantled and rebuilt with old bricks in lime mortar. A support pillar was also built under a cracked arch, and the dislodged stone slabs of the platform at the rear were also reset. In all Rs. 4,993 were spent on this monument, but much is still left to be done. Though the surroundings have been made neat and tidy, yet in order to give a fitting setting to this important mosque, fencing along the old lines of the platform, which has partly disappeared, and an approach road from the Railway Station to the main entrance, as well as other minor items of work, are much to be desired. It is a pleasure to note that visitors to Dholka never miss a chance of seeing this monument.

Sarnal.

"The work of constructing a retaining wall around the greater portion of the temple of Galteshvara Mahadeva, at Sarnal, in the Kaira District, started in the year 1919, was nearly completed this year at an expense of Rs. 1,451. This fine temple of the Chalukyan type with its domed *mandapa* stands beautifully at the confluence of the river Mahi and the small streamlet Galti. The place is reached by a footpath from the Angadi Station on the Branch Railway Line between Anand and Godhra on the B., B. and C. I. Railway.

Pavagadh.

"Amongst the important monuments at Champaner and Pavagadh in the Panch Mahals District, where works of conservation were carried out during the year, the Sat Manzil deserves special mention. This magnificent Mahal, or seven-storeyed palace of the Sultans of Gujrat, was built, as it were, in steps on the edge of a cliff to be approached only through hilly forest past the Sadan Shah Gateway at Pavagadh. Close by, even to-day, descends a mountain rivulet. Unfortunately, however, all the storeys of the structure, except the one at the bottom with a side stairway leading down to it, collapsed long ago. This one remaining storey even showed signs of slipping off from the edge of the precipice, but this Department hastened to its rescue in time. Accordingly the erection of a continuous buttress, on chisel-cut foundations, against the bottom wall of the square domed chamber, was recommended. The work was begun last year and has now been completed. The long outside wall of the stairway, which was considerably damaged and had come down to the level of the nosings of the treads, was raised to a sufficient height so as to form an effective barrier against visitors accidentally falling into the 'khad' below. Some repairs to the side walls and verandah in front of this chamber were also undertaken. Much, however, still remains to be done to this important structure. In all Rs. 6,999 were spent on special repairs to the monument, besides the Rs. 1,740 devoted to current repairs and maintenance of archæological buildings at Champaner and Pavagadh.

Sholapur.

"The porch in front of the *mandapa* of the ancient Chalukyan temple which was excavated in the inner rampart wall of the fort at Sholapur, suffered some damage by the collapse of a newly underpinned wall at its north-east corner. This was mainly due to improper construction with small *khandki* stones without proper bonding. It was, however, rebuilt with stones of large sizes during the year. The cost of this and other minor items came to Rs. 1,590, besides Rs. 640 spent on maintenance and current repairs.

Western Circle. Bombay Presidency.

It will not be out of place here to mention that the Sholapur Municipality has reconstructed the outer walls of the moat, which had been demolished by them in carrying out works in connection with the Rewani Improvement Scheme. A parapet wall, 3 feet high above the final ground level towards the roadside, has been built by the Sholapur Municipality over the moat wall, and an open *pakka* drain provided along the centre of the moat for the disposal of rain water.

Bijapur.

" Notwithstanding the non-acquisition of certain plots of land in private possession, which have been kept by Government as an open area around the Gol Gumbaz, the tomb of Sultan Muhammad, great improvements were effected in clearing and levelling the surroundings of this famous mausoleum. The view of the monument has been considerably improved since the year 1917. Some badly disintegrated and cracked stones of the bulged plinth on the west side have been carefully removed, and new stones put in the gaps. In addition to Rs. 759 paid last year, Rs. 2,245 have been spent this year as compensation for land acquired for the diversion of the road to the Bijapur Railway Station. Owing to paucity of funds, the unfinished work of the new compound wall could not be undertaken during 1922-23, but temporary trenches were dug across the modern road to prevent the ingress of cart-traffic through the north-eastern portion of the area.

" The conservation of the Gagan Mahal, the palace and darbar hall of the Adilshahi Sultans, is still in progress. To facilitate inspection, the two long flights of steps which once gave access to the rooms and hall on the first floor, have been thoroughly repaired. The remains of the old balconies in front of the side chambers to the main central hall on the ground floor, which were dismantled, have also been carefully rebuilt, every possible indication being left in the masonry so as to give an idea of the old construction. Besides the above, various other minor items were completed at a total cost of Rs. 2,374. It is only right to point out, however, that even with these repairs the view of the front courtyard is far from happy, as a modern *pakka* tennis-court has been laid here by the local gymkhana authorities.

" With a view to saving the only existing specimen of roof construction over verandahs in front of darbar halls in Bijapur, the building up of two support pillars under the over-hanging roof of the verandah of the Sangit Mahal at Torvi (Nauraspur or Navaraspur) was recommended. The work which was in progress last year, was completed during the year under report (*vide* Pl. XIV, fig. *a*). Necessary *kaccha* drains were made to dispose of rain water from the low level of the verandah and the adjoining area. A small gate with the masonry pillars was also provided. The total expenditure on these repairs amounted to Rs. 2,013.

" Proposals for the acquisition of the whole area included within the high octagonal enclosure walls, which was formerly let out for cultivation by Government, were finally approved, and the area acquired at a cost of Rs. 5,118.

" Immediately to the east, and built over the outermost wall of the Arq Qila moat, stands the monument variously known as the Asar Mahal, the Hall of Justice, and the Palace of the Relics. It was originally connected with a bastion of the citadel by means of a great arch and a gangway. A portion of the wooden ornamental ceiling resting

Western Circle.
Bombay Presidency.

on the two right side pillars under the roof of the great central hall—supported on four gigantic wooden pillars and two end-pilasters—was dangerously sagging and had to be taken down, after carefully numbering the various members, with a view to its proper conservation. On doing so, it was found that almost all the subsidiary beams were affected by dry-rot, and the load of the terrace had, therefore, to be slowly and carefully removed. A sketch plan showing the construction of the roof has been prepared, and an estimate based strictly on the original construction has been framed accordingly. The work is in progress. It may be of interest to describe here the details of the construction of this terraced roof. Over the primary beams running crosswise, secondary beams are placed longitudinally, and over these again *bargas* are placed at regular intervals of about 9 inches and covered over with bamboo matting, this in turn being covered over with a soling of thin bricks. Then we come to jack arches of bricks of one ring only over the secondary beams. Over these is laid a layer of lime concrete, consisting mainly of aggregates of bricks and gravel to a maximum depth of 4 inches from the crown of the arches. The surface is then neatly finished with a thin layer of *chunam*.

"In addition to the above repairs, minor special repairs to the Bukhari Masjid at Bijapur, and to the well at Ibrahimpur, were also undertaken. The works comprised mainly the removal of modern additions from the arched *dalan* on the north-east corner of the mosque, and the excavation of earth around the wall to expose the old plinth. A sum of Rs. 238 was spent on these two works.

"The services of Mr. S. M. Bangi, an inspector employed by this Department to look after the general cleanliness of all protected monuments at Bijapur, deserve special mention. Being a Muhammadan he naturally takes a keen interest in the preservation of Muhammadan remains, and at times acts as cicerone to visitors. The total charges for current repair and maintenance at Bijapur came to Rs. 7,316.

Bhaja.

"The special repairs to the caves at Bhaja which were in progress last year have now been completed at a cost of Rs. 354. The pathway up the hill has been repaired and the gradient made considerably easier, and a caretaker has been maintained to look after the caves."

Central Circle.

In the Central Circle, during the year under review, the Superintendent, Mr. J. A. Page, reports that a sum of Rs. 31,340 in all was expended on the Conservation of Ancient Monuments.

"Of this amount," Mr. Page says, "Rs. 13,803 was spent in the Province of Bihar and Orissa, *viz.*, Rs. 10,075 on Special Repairs (non-recurring expenditure) and Rs. 3,728 on Annual Repairs and Maintenance (recurring expenditure): and the residue of Rs. 17,537 in the Central Provinces and Berar, where Rs. 13,034 were expended on Special Repairs and Rs. 4,503 on Annual Repairs.

"With the exception of the operations at Nalanda, which were carried out by the Archæological Superintendent direct, all conservation work was done through the agency of the Public Works Department of the Local Government concerned: an additional charge of Rs. 24 per cent. on the estimated cost of the work being paid for this service.

Central Circle.

" On my tours of inspection in the Central Circle, it was again evident that the special considerations demanded in such conservation work to preserve the picturesque weather-stained aspect of an old fabric are not sufficiently appreciated by the Public Works Department officers in immediate charge of the repairs. White pointing widely spread over the surface of age-blackened stones is an ubiquitous disfigurement, no attempt having been made to harmonize it with the old work by the admixture in the matrix of powdered charcoal or other darkening medium ; while the distinctive character of the old masonry is not sufficiently studied in executing underpinning in old undermined walls. I have taken the opportunity whenever possible to demonstrate personally the simple methods by which such new repairs can be assimilated to the old work they are to supplement, and approved samples of such underpinning have been executed in my presence.

" While, however, it may be hoped to effect an improvement in this direction eventually by such means, the crux of the matter lies in more frequent and effective supervision by responsible officers of the Public Works Department while the actual operations are in progress : for it is often impossible for an Archæological Officer, single-handed, and charged with multifarious other duties, to supervise in person the execution of such works in a circle of superintendence embracing two Provinces, over which the several hundred individual monuments in his charge are widely scattered—frequently being located in the most inaccessible of places.

" The policy of retrenchment has most regrettably precluded the appointment of the small staff of conservation assistants for the Central Circle, by which it was hoped to meet these difficulties ; and in the absence of such aid the Archæological Department must continue to look to responsible officers of the Public Works Department to ensure that the directions of the Archæological Officer, conveyed in the printed Conservation Notes detailing the specific measures of repair applicable to a particular monument, are carefully and faithfully followed by the subordinates charged with the actual execution of the work. The preservation for posterity of the ancient relics of a country's history is no mean charge, and the active co-operation of all concerned is solicited to ensure that the measures taken to this end are appropriate to the purpose.

" A regrettable outcome of delay in the distribution of archæological grants to Executive Officers of the Public Works Department in Bihar and Orissa in the year under review was the surrender of the several allotments detailed below, since they could not be utilized in the short time then remaining before the close of the financial year :—

Grants surrendered unutilized during 1922-23.

	Rs.
1. Khandagiri and Udayagiri caves, and temples at Bhubaneswar, Orissa	248
2. Temples at Bhubaneswar, Orissa	3,968
3. Providing lightning conductors to Alwal Khan's tomb at Sassaram and to the buildings in the Rohtas Fort, District Shahabad	2,003
4. Mundeshwari temple at Ramgarh, Shahabad District	273
5. Palamau Forts	2,117
Total ..	8,609

Central Circle.

"As finally approved, the total grant for conservation in Bihar and Orissa amounting to Rs. 21,884 was placed at the disposal of that Government in the Education Department by the Director General of Archæology in India's letter No. 576-5063, dated the 9th October 1922; but the individual allotments comprising it were not distributed to Superintending Engineers of the several Circles of the Public Works Department till January 3rd, 1923 (*vide* Bihar and Orissa Government in the Public Works Department's letter No. $\frac{52\text{-}1\,B}{1\,A\text{-}10 \text{ of } 22}$, dated the 3rd January 1923). The lapse of 3 working months thus occasioned is indeed regrettable, and it is hoped that greater expedition will be found possible in future years.

"Among the more important conservation works taken in hand during the year were the following:—

Bihar.
Nalanda.

"On the conservation and maintenance of the excavated remains at Nalanda a sum of Rs. 5,095 was spent in 1922-23. Ranging in date from approximately the 6th century A. D. to the 12th, these old monastic remains are in several cases composed of a whole sequence of structures erected and re-erected on the same site after intervals of ruin and desertion; and this peculiar circumstance complicates considerably the measures demanded for their preservation. For it is the aim in conserving these excavated remains to leave intact a certain definite portion of each succeeding structure from the earliest to the last.

"The ruins, which are now almost wholly composed of brick—though in their original construction much timber was used for roofs and columns, etc.,—are being built up again to preserve the traces of the walls and other features where these have collapsed, and definite indications of their previous existence are still apparent; for in all this work of conservation no reconstruction is attempted for which such internal evidence is lacking.

"Among the structures on the site which were under repair in the past year was monastery No. I. where the ruined S. E. corner, externally, was built up, and the simple rounded string-course along the west front reconstructed on the model of an existing fragment of the old work, while the walls of the cells along both west and south fronts of this monastery were raised to bring them above the level of the old upper terrace again, similar attention being given to the cells along the east front. The ruined S. W. corner of the monastery was also rebuilt in conformity with the old work *in situ*, and the external wall along the north front raised to the level of the ruined walls of the cells here.

"In the south-west corner of the interior courtyard of this monastery, a mound of earth through which the excavations had been sunk has been left undisturbed, both with a view to preserving the important stratigraphic evidence it contains, and the three separate pavements of the upper levels of the monastery court which it supports. This mound was rendered secure by making the top watertight with concrete to supplement the remains of the old paving, a low inconspicuous parapet with a projecting spout being provided to divert the surface water clear of its sides in the rains.

"As mentioned in the previous year's report, the stratigraphic evidence contained in this feature is of unusual interest, as it discloses with extraordinary clearness the vicissitudes through which the various successive structures have passed from the period of the original foundation of the monastery. Layers of ashes, potsherds, heavy brick débris, more ashes, and finally natural earth accumulation are most clearly defined, and serve at once as an indisputable record of fire and destruction and of the abandonment and subsequent reoccupation of the site.

"The remains of the third and latest integument of the central *chaitya* in the monastery court, which integument appears to be contemporaneous with the 3rd stratum of occupation of the monastery itself, as counted from the top downwards, was supported on reinforced concrete lintels and ironmil cantilevers let into the earlier structure from which it projected some 12 inches. When this last integument was added to the earlier *chaitya* the ground level was coincident with its foundations: but now that the earth around it has been excavated to a depth of some 18 feet and the earlier strata disclosed, these foundations have necessarily had to be held up in position by other means; otherwise the feature itself and the evidence it contributes to the history of the site would have been lost.

"The wide original stair, leading from the higher verandah of the 4th level of occupation down into the internal courtyard some 15 feet below, is now complete, as far as the brick construction is concerned; though the concrete treads of the original steps have yet to be provided. The reconstruction of this feature was commenced in the previous year.

"Monastery No. I-A was also under conservation. The rear or southern wall of this monastery disappeared almost entirely in the original collapse of the old structure, and its brick facing was only recovered after excavating some 8 feet and more below the pavement level of the interior verandah. This rear wall is being built up again to the level of the ruined cell walls still *in situ*; and the similarly ruined wall on the west side has also been reconstructed in the same way. This latter wall forms the party-wall between monastery No. I-A and the adjoining monastery designated I-B which was brought to light during the year under review and is described in the Section on Excavation.

"The reconstruction of the fallen west wall of the entrance porch on the north side of this monastery No. I-A was also completed, as well as the low concrete parapet of the verandah enclosing the interior quadrangular court. From the evidence afforded by a few column bases left here and there *in situ* it has been possible to set out, and indicate in the reconstruction of the parapet, the position of the missing columns of the verandah; though the original columns themselves and the greater number of the stone bases supporting them have long disappeared.

"Difficulty and delay having been experienced with contractors in regard to the supply of the special large-size Gupta bricks necessitated for the appropriate repair of these old remains at Nalanda, experiments in brick manufacture were personally made by the Archæological Superintendent on the site, and a few thousand such bricks were

Central Circle.
Bihar.

satisfactorily produced at a cost effecting a very considerable economy over the estimates obtained from outside contractors. It is hoped to extend these brick-making operations in the immediate future, and so meet the pressing requirements of conservation on the Nalanda site.

Basarh.

"Another monument which received attention during the year was the excavated site at Basarh in the Muzaffarpur District, which has been identified with the ancient Vaisali, the capital of the Lichchavis, who first make their appearance in Indian history in the 6th century B. C. Excavations carried out by Dr. Bloch in 1903 went far to establish proof of the correctness of this identification; though the remains then disclosed did not antedate the Gupta period of the 4th century A. D. The work was continued by Dr. Spooner in 1912, who, like Dr. Bloch, was successful in bringing to light a great number of inscribed seals, clay figurines and pieces of pottery, among which one seal is ascribed to the 3rd century B. C. The total number of the seals thus recovered exceeded 1,200; but unfortunately very few remains of structural buildings were disclosed, and the regrettable circumstance of the relatively high level of the subsoil water present at the site prevented the excavations being carried down to a greater depth than 18 feet from the surface. Among the meagre fragments brought to light were, however, a finely polished black marble door lintel and a fragment of dressed sandstone bearing the magnificent polish which we have learned to associate with the 3rd century B. C. Emperor Asoka.

"It is worthy of mention that when the famous Chinese pilgrim Yüan Chwang visited Vaisali during his tour of the Buddhist centres of India in the 7th century A. D., he found the historic city very sparsely occupied, the bulk of its former inhabitants having deserted it; though from the various evidences of occupation recovered in the excavations briefly described above, it is apparent that Vaisali was an important centre of civil life during the 4th and 5th centuries A. D.

"In the year under review notice boards warning against exploitation of the site by the public were erected under the Ancient Monuments Preservation Act.

Kolhua.

Lauriya-Nandangarh.

"Another ancient monument in the same district, to which minor attention was given, was the Lion Pillar of Asoka at Kolhua where the modern base was secured with cement; and at the similar pillar at Lauriya-Nandangarh in the Champaran District a broken gate of the enclosure was repaired, the combined cost of these works amounting to Rs. 172. These pillars, together with other pillars of the same kind at Lauriya-Araraj and Rampurwa (Champaran) marked the stages of the journey to Nepal which Asoka undertook in the 21st year of his reign, in order to visit some of the holy sites of Buddhism. The Champaran pillars are further noteworthy as containing the celebrated Pillar Edicts of Asoka, Nos. I to VI; which respectively define the Law of Piety; admonish sins against that law; extend to prisoners under sentence of death three days respite in which to seek ultimate salvation; prohibit the slaughter of certain animals and birds, the burning of forests, the killing of fish and the castration of bulls and horses; and finally record some of the measures taken by Asoka to promote the growth of piety, incidentally asserting that the king reveres all religious denominations—but with different forms of reverence: 'for personal adherence to one's own creed is the chief thing, in his opinion.'

"Other archæological sites in the Champaran District under conservation during the year were the ancient mounds at Nandangarh, Sagardih, Kesaria and Jankigarh. Of these, the mounds at Nandangarh, some 20 in number, have been identified by Dr. Bloch as ancient Vedic sepulchral sites; while those at Kesaria and Sagardih contain Buddhist stupas, a round brick tower raised upon a brick platform being visible at the former site. This stupa at Kesaria, which has been assigned to the 1st century of the Christian era, has been identified with that described by the 7th century A. D. Chinese pilgrim Yüan Chwang as marking the place where the Buddha had appeared, in one of his former existences, as a *chakravarti* or universal monarch. The mound at Sagardih is thickly overgrown with jungle; and Dr. Bloch has expressed the opinion that it does not look like a promising site for any detailed investigation. The mound at Jankigarh, which is a huge and apparently solid mass of brick, was thought by Dr. Bloch to be some sort of fortification; an opinion which receives support in the local belief of its being a fort built by some ancient and fabulous Raja. The work done during the year at the sites of these mounds comprised the removal of jungle generally and the erection of notice boards under the Ancient Monuments Preservation Act VII of 1904 warning the public against exploitation of the mounds, which are apt to serve as a convenient quarry for building materials. The cost of these works amounted to Rs. 166 in all against an estimate totalling Rs. 160.

Central Circle, Bihar.

Kesaria.

Sagardih.

Jankigarh.

"The repair of Begu Hajjam's mosque in Patna City in progress from the previous year, was continued, a sum of Rs. 405 being spent on the work during 1922-23. The monument dates from the period of the early Muhammadan Kings of Bengal, having been built in the reign of Ala-ud-din Husain Shah (1493-1518) of that dynasty. It has, however, been subsequently repaired to a large extent; and a conspicuous feature of a repair apparently carried out in Mughal times is the enamelled tile-paving in the prayer chamber and courtyard of the mosque. The mosque conforms to the conventional plan and is surmounted by three domes covering the triple bays of the prayer chamber. It possesses no feature of distinctive interest architecturally; though the Tughra epigraph it contains recording the name of its founder is noteworthy.

"The works in hand comprise the repair of cracks in the arches and main roof, the renewal of a portion of the verandah roof, the repair of the floor and certain doors of the mosque, and the uprooting of trees encroaching on the monument.

"Steps for conserving the scanty remains of the old fort at Manjhi in the Saran District were also taken during the year, and a sum of Rs. 83 was spent in clearing the vaulted underground passages disclosed in the southern ramparts, which had become silted up through the overflow of an adjacent water channel. A notice board was also erected here advertising the notification of the monument under the Ancient Monuments Preservation Act, by which it is protected against exploitation. The ramparts of the fort rise some 30 feet above the surrounding fields, and are contained within a mound measuring some 1,000 feet east to west by 1,400 north to south. The fort appears to be ascribable to the later Gupta period. A brick bearing the inscription *Sri Prathamaditya* in characters of about the 6th century A. D. was found on the site in 1915; and it has been suggested that the name may conceivably be that of a hitherto unknown prince of the Gupta dynasty.

Manjhi.

Central Circle.
Bihar.
Palamau.

" The two forts at Palamau, known respectively as the Purana and Naya Qila, and located in dense jungle in the heart of the Forest reserve, were also under repair, a sum of Rs. 1,996 being spent during the year against an estimate of Rs. 4,411. The work done chiefly comprised the clearance of heavy jungle from the walls of the structures, while building materials have been collected on the site preliminary to their repair.

" The Purana Qila is said to have been built in the first half of the 17th century by Medani Rai, the foremost of the Chero Rajas of Palamau ; and the Naya Qila by his son Pratap Rai.

" The Old Fort stands on high ground rising in terraces, the upper or western half of the area being separated from the lower by a high transverse wall running north and south. The fort is rectangular in plan, measuring about 250 yards east to west by some 150 north to south. Its walls, built of rough rubble, are about 25 feet high and 7 feet thick ; and along their top externally is a line of projecting *kanguras*, loop-holed for defence, the passage behind them being bounded on the inside by a low parapet. The higher western half of the fort contains the ruins of the Raja's palace and is entered through a gateway, the upper storey of which forming an open pillared verandah seems to have been used as a *Naubat Khana*, whence musicians announced the movements of the Chief. In the north and west walls of the fort are two gateways ; and another exists to the south-east, known as the Singh Darwaza. This last is in relatively good condition, and is an interesting example of a small fortress gateway of its period. It opens out into a large court, in the south side of which a passage leads to an outer gate enclosed by high curtain walls ; the entrance being so planned that one has to turn five times before gaining access to the fort from the outside.

" Some 20 yards inside the breach in the fort wall through which the visitor enters —which was made by British Artillery in 1772 when the territory was annexed by the East India Company— is a ruinous brick mosque of triple domes, with octagonal towers at the corners of the rear wall. According to the *Tarikh-i-Daudia*, the mosque was built by the Mughal Governor of Bihar, Daud Khan Quraishi, in 1660 A. D. to commemorate his conquest of Palamau.

" The New Fort, built on the upper slopes of a conical hill, is also rectangular in plan, measuring some 250 yards east to west by some 100 north to south. Its walls of rubble masonry are 17 feet thick, and within their thickness is contained a continuous series of vaulted chambers loop-holed externally for defence, which were probably intended to accommodate the garrison. Along the top of the walls are the usual battlements, a passage some 12 feet wide running behind them. At the ends of the southern walls project two large circular bastions, octagonal internally and covered by hemispherical domes, which are pierced by four windows for light. In the middle of the floor of these bastions is a dry well, which seems to have been used for the storage of munitions.

" The main entrance to the fort, which is known as the Nagpuri Gate, is in the south side, and projects some 80 feet beyond the fort wall. The gate itself is ruined almost beyond recognition, but there still remains practically intact its remarkably fine outer

façade of close-grained stone, most elaborately decorated with a free arabesque of exquisite workmanship, and of a character typical of the Jahangiri style of Mughal Architecture. The inner structure of the gate has collapsed almost *in toto*, and one of the works undertaken during the year was the dismantling of a dangerously dilapidated mass of masonry to ensure the safety of the remaining structure which would have been seriously affected by its fall. Another item carried out was the construction of an approach path up the jungle-clad slope of the hill, to permit of easier access to the forts. **Central Circle. Bihar.**

" Palamau has had a varied and chequered history. The Kharwars, Oraons, and Cheros all claim to have been rulers of Rohtasgarh and subsequently to have migrated to Palamau. Bhagavat Rai, who took possession of the country in 1613 A. D. was the first of a long line of Chero Chiefs who ruled there for 200 years. Medani Rai, already mentioned as the builder of the Old Fort, was the most prominent chief of the dynasty. After defeating the Maharaja of Chota Nagpur, he penetrated as far as Orissa, and made himself Lord Paramount of the southern portion of Gaya and the greater part of Hazaribagh and Sirguja. The later Cheros fell through their own dissensions.

" Three Muhammadan invasions are recorded of the Chero territory : the first by Shaista Khan, Mughal Governor of Bihar, in 1641-42, who inflicted defeat on Pratap Rai and compelled him to render an annual tribute of Rs. 80,000. A year later, following a further Mughal inroad, the tribute was fixed at one lakh annually ; Pratap Rai being appointed Commander of 1,000 horse by Shah Jahan, and given Palamau as military fief with a *Jama* of two and a half lakhs. Provoked by the persistent refusal of tribute and their constant cattle-lifting raids into the Mughal territories along the frontier, Daud Khan, Governor of Bihar, determined to subjugate the Cheros once and for all. A strenuous fight in April 1660 lasting over 3 days made Daud Khan master of the district, and the Raja fled in terror to the jungles. A Muhammadan Faujdar was appointed to the charge of Palamau, but in 1666 he was removed and the territory placed directly under the Viceroy of Bihar. Ultimately the never-ending feuds of the Cheros led to the intervention of the British, and the territory was annexed by the East India Company in 1772.

" On the conservation of the Rock sculptures at Patherghatta, in the Bhagalpur District, a sum of Rs. 75 was spent towards the execution of repairs estimated to cost Rs. 131. On stylistic grounds the sculptures have been attributed to the 6th-7th century A.D. The most interesting of them is a long dado of figures in relief, locally known as *Chaurasi Muni*, and situated a little below the summit of the hill close to the Pataliputra cave. Among the images that have been identified are Vishnu, and his man-lion, dwarf, and boar incarnations. *Patherghatta.*

" The works in hand comprise the repair of the existing wire-railing along the monument and the refixing of its uprights in concrete ; the removal of ugly pointing from the pavement in front of the sculptures and its replacement by new, recessed in the joints ; the insertion of a neat fillet of darkened mortar to exclude water from behind the sculptures at the eastern end of the gallery ; the treatment of the decaying surface of certain portions of the sculptured dado with a fluid preservative, and the construction of a narrow footpath up the hill, to afford easier access to the monument.

Central Circle.
Bihar.
Rajgir.

" At Rajgir, a sum of Rs. 173 was spent towards the repair of the enclosure wall built to divert traffic from the ancient inscription in the so-called 'Shell-characters' cut in the rock-path through the defile leading to the Ramganga pass. The inscription, which is much damaged, has not yet been deciphered; and while its archæological importance has been questioned, it is nevertheless conceivable that the hidden record it contains may yet yield much of value for the early history of this ancient site; the origin of which takes us back to the hazy beginnings of the historical period in India; indeed, possibly antedates them.

" The work, the estimated cost of which is Rs. 300, involves the rebuilding of the broken portions of the boundary wall and the repair of its entrance gate; while jungle growth will be eradicated from the area it encloses.

Monghyr.

" A monument of the early Muhammadan period on which annual repairs were executed is the Dargah of Pir Shah Nafa at Monghyr which, along with the fort, is maintained by the Archæological Department. During 1922-23 a sum of Rs. 340 was spent on the maintenance of these monuments.

" The repairs executed comprise the maintaining weather tight of the Dargah and the gateways of the fort, including the eradication of harmful vegetation from them, and, in the latter case, the replacement of decaying roof beams.

" The Dargah contains the remains of an unknown saint reputed to have been a disciple of Khwaja Muin-ud-din Chisti, the celebrated early Muhammadan missionary of Ajmir. It dates from the year 1497 A. D., an inscription to that effect existing in the façade; but the structure is lacking in architectural interest. The Dargah is known as that of Pir Shah Nafa, *Nafa* being the Persian word for 'Musk'; the scent of which emanating from his original burial place in the ramparts of the Monghyr Fort, it is said, disclosed its hitherto unsuspected existence to the Bengali Afghan Governor, Prince Danyal, when engaged on their repair. Though the original fort is reputed to have been built by the early Muhammadan Kings of Bengal, the present structure—to judge by the architectural style of its remaining gateways—does not antedate the early Mughal period, when it was again repaired by the Emperor Akbar's famous Hindu Deputy, Raja Todar Mal, in 1580, while engaged in the conquest of Bengal.

" Monghyr is believed to be mentioned in the *Mahabharata* under the name of Modāgiri; but the earliest historical information about the place is derived from an inscribed copper plate of uncertain date, found within the fort area in 1780, which refers to a Raja Deb Pal, who flourished in the 10th century A. D. The plate, which seems to have been engraved to commemorate a meeting of the feudatories of the Pala Kings of Bengal, does not mention any town or fort at Monghyr, but merely relates that the king encamped on the spot and constructed a bridge of boats across the Ganges.

" Nor is Monghyr specifically mentioned in connexion with Bakhtiyar Khilji's conquest of Bihar; but with the rest of the province it was apparently attached to Bengal until 1330 A. D., when Muhammad Tughlaq annexed it to Delhi. From A. D. 1397 onwards for some 100 years it belonged to the Kingdom of Jaunpur. When Sikandar Lodi of Delhi overran Bihar in 1488, it was in the hands of independent Afghan chiefs; but about 1494 the Afghans seem to have submitted to Husain Shah of Bengal; and it is recorded that his son, Prince Danyal—already mentioned in connexion with

the erection of Pir Shah Nafa's tomb and the repair of the fort walls—obtained from the Sultan Sikandar Lodi a formal acknowledgment of the possession of Monghyr by the Bengali King.

Central Circle.
Bihar.
History of Monghyr.

" Monghyr was the headquarters of the Bihar army of the Bengali Sultans till its capture by Sher Shah, following on his defeat of its Bengali Governor Qutb Khan in 1533 : an action which was the first considerable success of the Suri in the struggle which eventually placed him on the throne of Delhi.

" In 1545 Monghyr came into the possession of the Karauni Afghan Sulaiman, who held South Bihar for Islam Shah Suri ; and in 1563, after his defeat of Adil Shah, the last of the Suris, Sulaiman became ruler of Bihar and Bengal under the suzerainty of the Mughal Emperor Abkar.

" In 1580, during the Mughal campaign against the insurgent Bengalis, Monghyr served for some time as the *point d'appui* of Akbar's forces, one of the commanders of which was the famous Raja Todar Mal, already mentioned as having repaired the fortifications. Monghyr again served as a centre of operations for Sultan Shuja, the second son of Shah Jahan, during the fraticidal war of 1657 for the succession at Delhi. In later times it was the capital of Nawab Mir Qasim, who established an arsenal in the fort ; and the town continued to be one of importance until his final defeat at Udanala in 1763 by the British. The fort was for some time occupied by the troops of the East India Company, and was the scene of an outbreak among the European officers known as the ' White Mutiny ', which was quelled by Lord Clive. The fortifications were, however, gradually allowed to fall into disrepair ; and the Nawab's arsenal and palace were eventually converted into the Collector's residence and the Jail, respectively.

Sassaram.

" The several monuments of the Suris at Sassaram in the Shahabad District are also maintained in order, and a sum of Rs. 247 was spent during the year on their annual repair. Of the exploits of the famous Sher Shah of this dynasty, from his rise to power in Bengal to his accession to the throne of Delhi in 1540, little need be mentioned.

" Descended from the royal house of Sur, Kings of Ghor, in 12th century Afghanistan, he had risen from the modest rank of administrator of a small district near Rohtas to be Prime Minister under one of the Lohani Afghans who styled themselves kings of Bihar in the time of Babar. On that Emperor's advance into Bengal, Sher Khan—tiger lord, so-called because he had killed a tiger that lept suddenly upon the king of Bihar—at first nominally sided with the Mughals. but this did not prevent his joining in Mahmud Lodi's attempts to recover the Delhi throne, nor his treacherously deserting the pretender at the battle with Humayun near Lucknow, which dispelled the Lodi's hopes.

" Though then again nominally reconciled with the Mughals, and making his submission to Humayun when Chunar was besieged in 1532, the Afghan never abandoned his dream of sovereignty. He skilfully enlarged his territories at the expense of the Kingdom of Gaur ; and, when Humayun advanced into Bengal against him, accomplished the capture of the fort of Rohtas from its Hindu chief : by which manœuvre he effectively took the improvident Humayun in the rear, and severed his communications with the Mughal capital.

Central Circle.
Bihar.

"Humayun was suffered to march along the Ganges past Patna till he reached a spot near where the Battle of Buxar, two hundred and thirty years later, once more decided the fate of the same Mughal Empire. Here, at Chaunsa, battle was joined, which resulted in the disastrous defeat of the Mughal and his flight to Agra.

"A year later, in 1540, the contending armies met again at Kanauj, and the battle that ensued put an end for a time to the Mughal Empire.

"Sher Shah was gifted with unusual administrative as well as military talents, and in his fiscal and other reforms are seen the true origin of many of Akbar's most famous measures. Not content with the administrative side of social reform, he went beyond most Muslim rulers and also attempted a certain crude legislation. His brief but beneficent rule came to an end in 1545, when he was killed at the siege of Kalinjar during a vigorous attempt to subdue the rebellious Rajputs. He left no fit successor to carry on his schemes. Under his son Salim Shah the ancient rivalries of the Afghans revived, and by the time of his death in 1554 the kingdom had reached a state of chaos. His son, a boy of twelve, was murdered by an uncle, Adil Shah, a debauché who left all real power in the hands of his Hindu Wazir Himu. In the inevitable rebellions which arose Ibrahim Sur seized Delhi and Agra, and Sikandar Sur, another nephew of Sher Shah, took possession of the Punjab and then drove Ibrahim out of his new sovereignty. In the midst of this turmoil Humayun, driven into exile 15 years before, seized his opportunity, and, descending from Kabul, routed Sikandar at Sirhind in 1555, when the kingdom of Delhi finally reverted to the Mughals.

"The mausoleum of Sher Shah is perhaps one of the most impressive monuments in all India. A mounting mass of triple tiers, octagonally planned, and relieved at the angles with numerous little *chattris*, the whole is surmounted by a great dome and solidly based on a high square terrace which arises from the waters of a lake. Spreading out to the water's edge is a continuous plinth of steps; while centrally in the sides of the high basement rise other narrow flights affording access to the main terrace above. This basement wall is relieved with domed pavilions of octagonal form, pierced in each side by pointed arches inset in a shallow square recess and shaded by a *chajja*; while little projecting oriel-balconies, carried on massive brackets, occur in pairs in each façade, effectively grouping with the larger pavilions at the corners.

"The main storey of the mausoleum proper, with its enclosing aisle, is treated as a continuous series of pointed arches, three to each façade, the arches being recessed in a shallow square architrave merging into the intervening piers and ornamented with little carved rosettes in the spandrils. A bold *chajja* on projecting brackets encircles this main storey, and is surmounted in turn by a continuous line of simple free-standing *kanguras*.

"*Kanguras* in shallow relief crown the plain storeys above; the terraced tiers progressively diminishing until they merge into the massive dome and the heavy spreading finial which surmounts it; while interest and grace is afforded to the outline by the little domed pavilions which appear at each salient angle of the terraces.

"On the north of the lake is the domed entrance gateway, leading originally on to a raised causeway across the water to the mausoleum; though this causeway has now disappeared and has been replaced by a lower earthen embankment.

"Seen in soft silhouette against the afterglow at dusk, its mass reflected in the broken silver of the lake below, through the blue haze of village fires, the monument leaves on the memory an abiding impress of its beauty.

"The vigour of its architecture is again reflected in the smaller tomb of Hassan Shah Sur, the father of Sher Shah, which is very similar in general design; while the chastely delicate carving which characterises the decorative treatment of the tomb of Aliwal Khan—the architect of these buildings—reveals a lighter element in the virile art of these 16th century Pathans, which developed more fully with the Mughals who followed them.

"The tomb of Aliwal Khan is represented by a large square enclosure open to the sky, of which only part of the original surrounding walls exists. The feature of outstanding interest is the main Entrance Gateway surmounted by dual *chattris*, four-columned and shaded by a wide *chajja*, which project from the façade, continuing the upward trend of the flanking piers below. Relieving these piers are triple niches separated by shallow string courses; and inset between them is the high entrance arch of pointed form enclosing a trabeate opening spanned by heavy corbelled brackets. It is around this opening that the elaborate and delicately incised arabesques already mentioned are concentrated. The gateway, in its original entirety, must have been a very graceful piece of design; though the present lack of crowning *kanguras* and a probable centre pavilion detracts from its proportions. The monument was put into substantial repair several years ago, and only petty items, such as the removal of noxious vegetation and the weather-proofing of the fabric, were necessitated in the year under review.

"Yet another monument of this group on which similar minor repairs were executed is the ruined tomb of Salim Shah which, like the tomb of Sher Shah, is located in a large artificial lake. The tomb itself is a complete ruin, but the causeway across the water by which access to it is obtained is relatively intact, and is of special interest since the similar feature of Sher Shah's mausoleum has entirely disappeared. The causeway is characterised by a succession of lintel-headed spans bridged by a corbelled construction, the piers between them being emphasised by a series of projecting balconies on heavy brackets, surmounted originally by small *chattris* of the square open columned type characteristic of the architecture of Sher Shah; though these *chattris* have now all disappeared. Comprehensive proposals have been made by the Archæological Superintendent for securing the remains of this unique monument from further dilapidation, and it is hoped that funds may be forthcoming in the near future to give effect to them.

Rohtasgarh.

"Another notable monument associated with Sher Shah Sur, which is maintained by the Archæological Department, is the Rohtas Fort, also in the Shahabad District. He is said to have obtained possession of it from a Hindu Raja in 1539 by the familiar stratagem of introducing armed men in women's litters. From its security he was able to overrun Bengal and finally to inflict the decisive defeat on Humayun's forces which resulted in the expulsion of the Mughal from India.

"The fort, which is situated on an extensive plateau some 1,500 feet above sea level, boasts a considerable antiquity and is said to derive its name from a young prince

Central Circle. Bihar. Rohitasva, son of Raja Haris Chandra of the Solar Dynasty, to whom the hill is held sacred.

"The walls have a circuit of some 28 miles, and the principal fortifications now extant are at Raj Ghat and Kathkauliya. The only records of Hindu times connected with Rohtasgarh are a few short rock-cut inscriptions at various places on the plateau. The first, at Phulwari, dates back to 1169 A. D., and refers to the construction of a road up the hill by Pratapadhavela, the chief of Japila (the modern Japla, on the opposite side of the Sone river). From another short inscription in the fort we learn that this chief belonged to the Khayaravalavansa ; and a further record of Hindu rule here is contained in an inscription near the Lal Darwaza dated 1223, which mentions a descendant and successor of Pratapadhavela of the same name.

"The two temples on the north spur of the fort, called after Rohtas and Haris Chandra respectively, appear to be of later date. The former shrine stands on a high terrace approached by a long flight of steps. The *mandapa* has now practically disappeared, together with the upper portion of the *sikhara* tower. The latter feature is square in plan with slight central projections relieving the façade, which is further decorated with bold mouldings. In each central projection is an empty niche, formerly containing an image. The only carving is on the entrance doorway, on the lintel of which is depicted a small dedicatory figure of Ganesh, indicative of a Saivite shrine.

"Close by this monument exists the Haris Chandra Temple, a small pavilion-like structure, four square in plan, and enclosed by a verandah, with a square porch boldly projecting from the centre of each façade. The whole is encircled by a wide continuous *chajja* and is imposed on a high *chabutra*, reached by a small flight of steps. Over the central chamber is a dome, and smaller domes occur over each projecting porch. The shrine is reputed to have been erected by Raja Man Singh, who occupied the fort during his Viceroyalty of Bengal under Akbar between the years 1580 and 1600 A. D.

"Monuments dating from Sher Shah's reign here are the mosque and tomb of Habbas Khan, and the Jami Masjid. The mosque takes the usual form of a hall divided into three domed compartments by transverse arches, and contains nothing of distinctive character. Those arches have latterly been strengthened by building additional semi-circular arches beneath them, as the structure was in danger of collapse.

"The tomb of Habbas Khan is built on an imposing scale and is situated in a large square enclosure, with a low octagonal turret at each corner. It is square in plan, and from an octagonal-shaped drum above springs a fine dome ; while four domed *chattris* crown the angles of the roof below it.

"Of the Jami Masjid an interesting feature is the Persian inscription on the façade, containing the name of Sher Shah. The mosque is of more interest architecturally than that of Habbas Khan, the east façade being treated more decoratively, and the proportions being more attractive. A notable feature of the interior treatment is the corbel construction adopted to negotiate the difference in shape between the square bays of the triple compartments and the circular domes above ; octagons and sexta-decagons intervening in the dome-drum between them.

"A noteworthy monument in the fort is the palace which was occupied and largely repaired by Raja Man Singh, for whom the fort served as a convenient stronghold. The buildings here, which comprise a *Shish Mahal*, Darbar Hall, Eunuch's quarters, *Phul Mahal*, *Hammam*, and a large *Baradari*, are all distinctively of the early Mughal style of architecture; while a notable feature of the palace is the main entrance gateway, called the Hathi Pol—from the pair of small elephants in niches flanking the façade, which were so popular a feature in the fort gateways of the period. Central Circle. Bihar.

"On the annual repair of the fort a sum of Rs. 308 was spent during the year, the work comprising the removal of jungle growth generally and the rendering of the structures secure against the weather. The sum includes the wages of a chowkidar.

"Still another monument of Sher Shah's reign, on which annual repairs were executed during the year, is the now badly ruined hill fort of Shergarh, inaccessibly located in a jungle tract in the Shahabad District. The plateau of Shergarh, which is much lower and smaller than that of Rohtasgarh, being only about 4 miles in circumference, is surrounded by stone fortifications with several bastions and defended *ghats*. The chief ascent is to the north, where a broad flight of stone steps winds up to a great gate on the lower part of the plateau. Passing through this, the road crosses a depression where there is a large tank, and leads through two more strongly fortified gates to the summit of the higher slope on which the palace stands. Situated on the edge of a precipice, the palace commands a beautiful view over the valley of the Dargauti and the hills beyond. Its buildings consist of two square courts enclosed by four open galleries, which are supported on pillars in front and open into a series of closed rooms behind. Owing to the slope of the ground, the southern courtyard is much higher than the northern one. *Shergarh.*

"The *tahkhanas*, or underground rooms inside the palace, constitute the most remarkable feature of the building. Most of them received no light from above, and may have been used as store-rooms: one at least served as a water-reservoir. A well-lighted room in the north courtyard is said to have accommodated the Zenana; while just outside the palace are two open-pillared halls, reputed to have been used as a *Diwan Khana* or office; and near one of the palace gates there is a mosque.

"The structures generally are very dilapidated, the better preserved portions being the Zenana and the other rooms beneath the courtyard. The repairs carried out this year comprised the cutting of jungle, the propping of a broken beam of the entrance gate, the clearance of the silt from a well, and the general removal of débris from the palace site, the cost of these works amounting to Rs. 195.

"A noteworthy monument of the early Mughal period, also under maintenance, is the tomb of Makhdum Shah Daulat, or the Chhota Dargah, at Maner, in the Patna District; on which a sum of Rs. 171 was spent. The works comprised the eradication of jungle growth, the renewal of lime pointing, and similar petty repairs to keep the structure watertight; while silt was also removed from the inlet of the adjacent lake. *Maner.*

"The Dargah is recorded to have been erected between the year 1608 and 1616 by Ibrahim Khan, the Mughal Governor of Bihar, who was one of the saint's disciples.

Central Circle. Bihar.

"The monument is a fine piece of architecture. Of pleasing proportions, it is elaborately ornamented with relief carving and perforated *jali*-screens of great delicacy and high finish. Square in plan, the tomb stands on a raised platform, and is surmounted by a large dome terminating in a small turret-like finial. A deep *chajja* on ornamented brackets divides the façades into two storeys, the lower of which is enclosed by an open colonnated verandah of trabeate design.

"At the four corners of the tomb, the verandah bays are infilled with a solid screen wall relieved with small triple openings of arch-form; and above these solid corner bays rise four open columnar pavilions crowned by domes.

"A second *chajja*, continuous around the main façade and projecting corner pavilions, shades the upper storey, the clustering domes of which are an effective feature of the design. Enclosing the raised court in which the tomb is centred are a series of *dalans*, the west side accommodating a mosque roofed by a long barrel-vault of pointed section; while on the north is the main entrance gateway imposed on a high *chabutra* externally and approached by a wide flight of steps. Inset among trees and picturesquely located by the side of a spacious square lake, the Dargah is perhaps one of the finest monuments of the Mughals now extant in the Province.

Hadaf.

"Also under maintenance, another monument of Mughal rule in Bihar is the ruined mosque and bridge at Hadaf, in the Santal Parganas, the original site of the present Raj Mahal some 4 miles away to the east. Rajmahal served for some time as the headquarters of Raja Man Singh, Akbar's Deputy in Bihar between the years 1580-1600, to whom the building of the mosque is ascribed. Erected on a great scale, the structure is a fine example of the early Mughal style, though certain of its features, notably the long pointed barrel-vault traversing the central bay of the prayer chamber, recall the architecture of the Jaunpur kings. Flanking the high central chamber are lower bays roofed with a series of domes carried on a multiplicity of little corbels in the pendentives intervening between the four-square arches below. The high vaulted central bay of the prayer chamber rises with square walls, externally, above the adjoining roof, it's sides being inset with a range of small clerestory windows; while at the rear corners of the mosque slender minarets lend interest and grace to the design.

"To the east, before its open arcaded façade, *chajja*-sheltered and crested with *kanguras* originally, extends a spacious court with central *hauz*; the enclosure wall being relieved with niches and pierced by entrance gateways in the centre of each side. Unfortunately the monument is now much ruined and bereft of nearly half of its prayer chamber; though what remains is well deserving of conservation.

"The Mughal bridge near-by, which appears to be of somewhat later date, is a structure, some 240 feet long, of six openings spanned by pointed arches, its piers being strengthened with pointed cut-waters. At each end a large round bastion diverts the flow of the stream from the abutments of the bridge.

"The works carried out on the mosque comprise the cutting of jungle, and the repair of leaking domes and vaults; while pointing was executed on the bridge and the approaches thereto were laid with gravel. The cost of these repairs was Rs. 125.

" On the annual maintenance of the monuments at Buxar a sum of Rs. 272 was spent in the year 1922-23. The structures include the Battlefield Memorial a simple obelisk of curving sides and pedestalled base, raised on a low stepped platform and contained within a grassed enclosure some 33 yards square. The monument was erected in 1920 to commemorate the Battle of Buxar fought between the British forces under Sir Hector Monro and the army of Shujau-d-daula, Nawab Wazir of Oudh, and his ally Mir Qasim, the last independent Nawab of Bengal. The action, which took place in the year 1764, resulted in the defeat of the Nawabs and the cession of the Lower Provinces of Bengal to the British. **Central Circle.** **Bihar.** *Buxar.*

" The fort of Buxar, of which tactical advantage was taken by the Nawab's army in the action, stands on a high bluff above the Ganges. It effectively commands the higher reaches of that river, and thus occupies a position of considerable strategic importance. After this victory it passed into the hands of the British, and a large body of troops were stationed here for an extended period. Bishop Heber, visiting the fort in 1824, describes it as consisting of a small square with a high rampart cased with turf, a deep and wide ditch, a good glacis, and a sort of lower fort extending to and commanding the river. The fort, no longer a military post, now accommodates the residence of a Public Works Department Canal Engineer.

" Another relic of the battle is the walled enclosure at Katkhauli, some four miles away, containing the simple graves of the Nawabi Generals Shuja Quli Khan and Sayyid Ghulam Qadir, who were killed in the fight. *Katkhauli.*

" The repairs carried out embraced the maintenance of the approach road to the Battlefield Monument, the upkeep of the lawn about it, the pointing of the platform masonry and similar petty works ; while in the case of the fort the work involved the repair of broken plaster and the repointing of the walls, magazine and sentinals' kiosks, the removal of harmful vegetation therefrom, and the consolidation of the approach road with *kankar*. Similar petty attention was given to the plastered graves of the Nawabi Commanders and the enclosure wall above them.

" Towards the conservation of a group of the temples at Bhuvanesvara in Orissa, the estimated cost of which is Rs. 3,777, a sum of Rs. 380 was spent this year. The temples affected comprise the following, (*a*) The Linga Raja and subsidiary shrines, (*b*) Brahmesvara, (*c*) Muktesvara, (*d*) Raja Rani, (*e*) Parasuramesvara, (*f*) Bhaskaresvara, (*g*) Maghesvara, (*h*) Chitrakarini, (*i*) Maitresvara, (*j*) Vetal Deul, (*k*) Yamesvara, (*l*) Ananta Vasudeva, (*m*) Somesvara, (*n*) Sari Deul, (*o*) Siddhesvara ; and the work consists principally in fitting to the openings of each shrine iron frames infilled with expanded metal to exclude birds and animals from the interior : in certain cases similar gates being provided to the courtyard entrance also. The eradication of jungle growth and harmful vegetation from these structures generally is also to be undertaken, while in the case of the Chitrakarini temple a missing stone is to be replaced in the spire. Petty repair will also be done to the masonry in the temples of Muktesvara and Yamesvara, and a leaking roof mended in the Maitresvara. Enclosures about the shrines are also to be levelled and the earth dressed tidily. **Orissa.** *Bhuvanesvara.*

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Orissa.

"These works are being undertaken to complete the repairs commenced some years ago on the notification of the monuments as protected under the Ancient Monuments Preservation Act VII of 1904. Objection was, however, raised to this procedure by the Hindu custodians of the shrines, and as no satisfactory settlement could be reached, the notification of protection was withdrawn, and the repairs then started were abandoned. As a special case, the Government of India have now agreed to the completion of these works at a cost of Rs. 2,410, and to the correction of certain faulty repairs carried out on several of the temples by the Bengal Government between the years 1898 and 1902, which will entail a further expenditure of Rs. 1,207; while an additional sum of Rs. 160, included in the total estimate of Rs. 3,777 quoted above, is to be spent on the works necessitated on the Somesvara Temple, which the Public Works Department reports to be the property of Government. Of all the temples enumerated above, only the Raja Rani shrine is now notified under the Ancient Monuments Preservation Act (*vide* Government Notification No. 2488-E., dated the 1st November 1913).

"The earliest temple in Bhuvanesvara is believed to be that called Parasuramesvara, a Saiva shrine, ascribable on stylistic grounds to about the 8th century A. D. The temple tower measures some 20 feet square at the base, and is about 42 feet in height. From base to summit its surface is covered with sculptures of the most elaborate character, but without detracting from the simplicity and vigour of its outline. The tower, with its four-square curving sides relieved with a dominant central facet and lighter vertical projections at each corner, is treated as a multiple series of narrow horizontal bands, undercut to give a light shadow-relief between them. Superimposed *chaitya* forms, elaborately carved, embellish the flat surface of the prominent centre facets of the *sikhara*, and at the angles an intermittent series of attached *amalaka* forms rises to meet the large circular *amalaka* crowning the structure. In front of the tower projects the *jagamohan* or porch, a feature which is believed to have been added later, distinguished by a unique treatment of little clerestory windows, which occur beneath the eaves of the plain sloping roof. The walls of this structure are again elaborately carved, affording a certain uniformity with the main tower.

"The simple outline of both the tower and the *jagamohan* stands in marked contrast to the elaboration of the later examples of the style, among which the Raja Rani temple, dedicated to Vishnu, is conspicuous. Here, in this latter shrine, the simple four-square plan of the solid tower has developed almost into an octagon, arranged with multiple off-sets and projections to give great variety and play of light and shade, and an emphasis to the vertical trend of the design. The details still are of much beauty, no deterioration in this respect being apparent in the five centuries or so that separate this shrine from the Parasuramesvara. A feature strongly developed, and specially indicative of its later age, is the decoration of the *sikhara* tower by multiple repetitions of itself in miniature. to such an extent as almost to obliterate the original form of the temple.

"As is characteristic of the generality of these Bhuvaneswara shrines, the porch is astylar; but a feature strongly marked in the Raja Rani temple is the prominently projecting bay centering in each façade, surmounted by its own pyramidal roof and

carried on circular columns. Around these columns twine female *nagis* with seven-fold hoods, their tails resting on three griffins mounted on triple elephants (compare the Gond emblem at Chanda, etc., in the Central Provinces). In the flanking projections are contained windows, the entrance door being placed in the similar projection axial with the *vimana* or shrine; and on the entrance lintel is depicted the dedicatory figure of Lakhshmi.

"While the lower walls of the *jagamohan* are conspicuously plain, in comparison with the elaborated *sikhara*, its pyramidal roof exhibits marked development from that of the Parasuramesvara shrine. Here, at the Raja Rani, this feature partakes of the form of a continuous series of narrow cornice-bands, deeply undercut to afford a sharp horizontal shadow between them. Of attractive proportions, the temple has been aptly described as one of the gems of Orissan art.

"Chronologically intermediate between the two monuments described above is the Great Linga Raj Temple, the original structure of which, comprising the usual *vimana* and *jagamohan*, has been subsequently added to by the erection of *nata-mandir* and *bhoga-mandir* before it; so that the structure comprehends a series of four contiguous chambers axially arranged.

"The monument has been described as 'perhaps the finest example of a purely Hindu temple in India'. In height it is over 140 feet to the summit of the *sikhara* tower; and, as with the other temples described above, the whole surface is covered with carving in the most elaborate manner.

"Here, too, is seen an intermediate stage in the elaboration of the tower outline, the miniature decorative *sikharas* appearing only in the intervening facets of the curving *sikhara* sides, which have not departed largely from the square in plan. The central projections vertically dividing the façades of the *jagamohan*, again, lack the extreme prominence of those of the later Raja Rani temple; though the same elaboration of the roof over this portion, with its multiple undercut cornice-bands is in evidence.

'The three prominent examples mentioned above represent the Indo-Aryan style of architecture as manifested in the temples of Orissa.

"A parallel development exhibiting distinct Dravidian influence is also apparent in certain of the shrines. An instance of this is to be found in the temple of Vetal Deul where the crowning features of the *sikhara* are definitely reminiscent of the rock-cut Raths of Mamallapuram, in Madras; though the rest of the structure exhibits a more general conformity to the style represented by the early Parasuramesvara temple mentioned above.

"It is of interest to note, in passing, that an analogous instance of the dual development of the Indo-Aryan and Dravidian styles occurs again at Pattadakal on the outskirts of the ancient Chalukya capital Vatapi (Badami) in western India, at approximately the same latitude.

Central Circle. Orissa.

"The shrines at Bhuvanesvara number hundreds: but the above briefly summarises the salient characteristics of their distinctive architectural style, as it developed from the 8th century A. D. to the 12th.

Konarak.

"Another monument similarly maintained, and on the annual repair of which a sum of Rs. 311 was expended in the year under review, is the famous Black Pagoda of Konarak, in Orissa. The major part of this sum was paid as wages to the chaukidars and malis employed to keep the temple and its enclosure in good order. The monument is situated on the sea coast, and its name 'Black Pagoda' originated with the early European mariners, for whom it served as a convenient land-mark. It is so mentioned in the diary of Sir Streynsham Master, Governor of Fort St. George (Madras) in connection with a voyage along the coast in 1675. The temple, which is dedicated to the Sun God Arka (otherwise Surya) at Kona, was constructed by Narasimha I (1238-64 A. D.) of the eastern Ganga dynasty of Kalinganagara—the modern Mukhalingam of the Ganjam District—a dynasty comprising 18 kings whose rule lasted till 1435, when it succumbed to the Suryavansas.

"The outstanding impression conveyed by this monument is one of stupendous mass, perfectly proportioned and elaborated with ornamentation of extreme delicacy; though the structure is now but a ruin. It was contained originally within a court, which measured some 890 feet by 540, and was enclosed by a wall surmounted by battlements, little trace of which, however, now remains. The principal gateway was located in the east side.

"Abul Fazl, describing the monument in the *Ain-i-Akbari*, mentions 3 portals; the eastern one being carved with elephants bearing men in their trunks; the western with horsemen; and the northern with tigers rampant on elephants (compare again the Gond emblems at Chanda and elsewhere in the Central Provinces). He also speaks of a great column of black stone 50 yards high in front of the shrine.

"The main shrine rises from a high plinth, which, in common with the rest of the structure, is covered with elaborate carving and sculptures. Its distinctive feature is, however, the great chariot-wheels, to the number of 24, carved at intervals along the sides; thus representing the whole structure as a *rath* or chariot of the Sun God.

"Of the temple *sikhara*, or tower, all but the lowest third has disappeared, and now only the *jagamohan*, or porch, remains in any degree intact. Architecturally, the great beauty of the temple arises from the form of the roof over this latter portion. Of pyramidal shape, it is divided into three main tiers, each subdivided by multiple cornice-mouldings broken around projecting facets to give vertical relief to the dominant horizontal lines. The play of light and shade which this treatment induces is of singular charm: and further interest is afforded by the bands of tiny figures cut into the face of the mouldings. A corresponding elaboration is carried down on to the main façade, giving unity and coherence to the whole design; while several dedicatory images of the Sun God Surya decorate the exterior niches of the *vimana* or sanctum.

"Internally the structure is singularly plain, the roof being formed by a simple corbelled construction following approximately the outline of the exterior slopes, and

supporting a flat slabbed ceiling carried on wrought iron beams. A smaller temple dedicated to Mayadevi and subsidiary to the main shrine exists in the same enclosure, along with the *Nat Mandir* or dancing hall; and other features of interest are the large figures of horses and elephants, and tigers rampant on elephants set up on detached platforms within the area. **Central Circle.** **Orissa.**

"The work of conserving this monument was begun in 1901, since which date a sum of Rs. 1,10,500 in all has been spent on its repair. The work involved the removal of the great quantity of sand which covered the whole site and obscured the basement of the temple, as well as comprehensive structural measures for the security of the buildings themselves; while, with a view to preventing the future accumulation of wind-blown sand, a range of small trees was planted around the site to act as a protective screen. The many fallen sculptures recovered on the site were also collected and transferred to a museum built in 1914-15 at a cost of Rs. 10,000 to accommodate them in the immediate vicinity. On the maintenance of the latter structure a sum of Rs. 37 was spent in the year under review.

"The Barabati Fort at Cuttack in Orissa is also maintained, and a sum of Rs. 63 was spent on the annual repair of its ruined walls and entrance gateway. The fort was built by Mukandadeva, the last independent Hindu ruler of Orissa, who in 1560 A.D. usurped the throne of the short-lived Bhoi dynasty; and who was himself slain eight years later in an encounter with a rebellious feudatory while resisting an invasion by the Bihar Afghans, as a result of which Orissa became a Muhammadan Province. In the *Ain-i-Akbari*, the fort is described as containing a fine palace of nine courts, the first of which was used for the elephants, camels, and horses; the second containing military store-rooms and the quarters of the guards and attendants; the third was occupied by porters and watchmen; the fourth by artificers; and the fifth contained the kitchens; the sixth comprised the Raja's public compartments; the seventh was used for the transaction of private business; the eighth was the zenana; while the ninth contained the Raja's own sleeping compartments. *Cuttack.*

"The fort, which had double walls of stone, enclosed a rectangular area of some 2,150 feet by 1,800 feet. Little survives of the monument, however, in which are now located various modern buildings of the Civil Station.

"The repairs done comprised the removal of jungle growth and vegetation from the fort generally; while those for the ruined gateway, which is practically all that now remains of the fortifications, included also the filling of cracks and the re-setting of loose masonry on the roof, as well as the securing of broken edges of plaster."

"The Jami Masjid at Asirgarh (Pl. XXI, fig. *a*) was another monument under conservation this year. Picturesquely imposed on the crest of the Hill Fort, with its towering minarets visible for many miles around, the mosque is a noteworthy monument of the period of Shah Jahan; though its architectural features are indigenous to the locality and reflect little of the influence of the Mughals. **Central Provinces.** *Asirgarh.*

"Raised on a high plinth the prayer chamber is a spacious hall, open on the east front and divided into multiple bays by intersecting arches of pointed form carried on

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piers. The west wall contains the main central *mihrab* and a series of subsidiary *mihrabs*, which last have latterly been converted into little window openings. In front of the prayer chamber is a quadrangular court enclosed on its other three sides by an arcaded *dalan* repeating the features of the mosque façade; and in the eastern side of the enclosing arcade, at its southern end, a triple-arched entrance affords access into the mosque.

"The mosque had formerly been used as a barrack during the military occupation of the fort by the British, and the works in hand aim at the reclamation of the monument to its former state. The work involved the dismantling of a modern structure erected on the roof; the removal of alien window-frames from the *mihrab* recesses in the west wall, and the making good of damaged plaster, as well as the dismantling and rebuilding to the old design of the southern *minar* which was in a very precarious condition; all of which work was practically completed in the year 1920-21. In the year under report, the replacement of fallen *chajja* stones and their supporting brackets, both along the east front and in the flanking *minars*, was continued, and a sum of Rs. 2,170 spent on the work.

"On the maintenance of the Asirgarh Fort itself (Pl. XXI, fig. *b*) the principal item in which is the removal of jungle growth from the walls — a sum of Rs. 567 was spent.

"The fort, which is believed to have been mentioned in the Mahabharata as the seat of worship of the legendary warrior Asvatthama, consists of three separate lines of muniments, the uppermost, known as Asirgarh proper, measuring at its greatest some 1,100 yards in length and 600 in width north to south. Of the two fortifications below it, the higher one is called Kamargarh and the lower Malaigarh; while the main avenue into the fort on the south-west side passes through five gateways by a steep ascent of stone steps.

"In 1295 Asirgarh was held by the Chauhan Rajputs; and Ala-ud-din Khilji, on his return from the first Muhammadan incursion into the Deccan, stormed the place and put its garrison to the sword. It came into the hands of the Faruqi kings of Khandesh in about 1400 A. D., and was greatly strengthened by them, the lower fort, Malaigarh, having been entirely constructed by Adil Khan I, the fifth king of that dynasty. Asirgarh was their principal stronghold, to which they always retired when the capital Burhanpur was threatened by hostile armies. It remained in their possession some 200 years, till in 1600 A. D., the Mughal Emperor Akbar annexed Malwa and Khandesh, capturing Asirgarh, along with its defender Bahadur Khan, the last of the Faruqi line, after a protracted seige. A contemporary inscription cut in the rock near the main gateway records this event; while another inscription near the large tank in the fort commemorates the building of the Jami Masjid, earlier mentioned, in the reign of Shah Jahan. The fort subsequently passed into the hands of the Mahratta Peshwa Baji Rao in 1760, and 10 years later was made over to Madhoji Sindhia, from whose descendant it was captured by Wellesley shortly after the battle of Assaye. It was, however, immediately returned to Sindhia; but as a result of a second seige in 1819 it reverted permanently to the British.

"The neighbouring fort at Burhanpur also received attention, and the undermined walls of the Zenana enclosure were usefully underpinned; while the dangerously dilapidated portions of the terrace along the river front of the same court were enclosed by a railing of angle-iron posts and stretched-wire to exclude the public, it not being feasible to repair these remains. A sum of Rs. 882 was spent in completing this work, which was in progress from the previous year.

Central Circle. **Central Provinces.** *Burhanpur.*

"The city of Burhanpur dates from about the year 1400 A. D., when it was founded by Nasir Khan, the first independent prince of the Faruqi dynasty of Khandesh, who is said to have named it after the famous Shaikh Burhanu-d-din of Daulatabad; while the fort or citadel, standing some 80 feet high on the right bank of the Tapti, is ascribed to Adil Khan I, the fifth of the dynasty.

"Burhanpur remained the capital of the Faruqis till Akbar annexed Khandesh in 1600, and during this period it was repeatedly sacked by the rival Muhammadan princes of the Deccan. The only monument now extant of this time in the fort itself is the pair of minarets of primitive form which rise from the ruins of the Qila-ki-Masjid; though others exist in the town outside in the Jami and Bibi-ki-Masjids.

"Till 1635, when it was reduced to the status of capital of the Khandesh Subah, Burhanpur was the seat of the Mughal Viceroys of the Deccan, who, greatly extended and embellished it. The bulk of the present remains in the fort appears to be ascribable to the Mughal occupation, as well as the elaborate system of water-works in the town.

"Burhanpur was plundered by the Mahrattas in 1685 in the very presence of Aurangzeb, then engaged in an expedition for the final conquest of the Deccan. Twenty years later they again sacked its suburbs; and by 1716 the *chauth* of the Deccan Subah was formally conceded to them. The Nizam Asaf Jah resided much at Burhanpur after his seizure of the Government of the Deccan in 1720, and he built the brick wall surrounding the modern city. After being successively in the possession of the Peshwa, Sindhia, the British, and Sindhia again, Burhanpur finally passed to the British in 1860.

"The best preserved relic in the fort is the Zenana Baths built in the distinctive early Mughal style, which are now used as a Dâk Bungalow; though it is hoped eventually to reclaim them as an ancient monument, after Rest-House accommodation has been provided elsewhere. The baths are located in the Zenana enclosure mentioned earlier as being under repair.

"At Burhanpur, again, work was continued on the tomb of Nadir Shah (? Nasir Shah: 1399-1437 A. D.) (Pl. XXI, fig. *d*) of the Faruqi dynasty of Khandesh, and a further sum of Rs. 1,648 spent during the year against a revised estimate totalling Rs. 9,775. The cost of the work to date amounts to Rs. 7,458.

"The tomb, which is a simple structure, four-square in plan, with flat façades relieved by shallow central projecting bays, is surmounted by a massive dome imposed on a high octagonal drum. A continuous and boldly projecting *chajja*-cornice, carried on carved brackets, shaded each front originally; but this has now disappeared almost entirely. Above the *chajja*, a deep parapet is divided by a subsidiary string-course, the lower portion containing a frieze of shallow *mihrab*-shaped panels; which feature

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is echoed in the façade below. Crowning the parapets are the remains of a few free-standing *kanguras*, and the large dome terminates in a tall finial. Three arched openings, infilled with perforated stone *jali*-screens, pierce each facade, except the west, which accommodates the *mihrab*. The whole structure is raised on a high podium or *chabutra* reached by a flight of steps on the west side.

" The conservation of this monument involved the refacing with coursed rubble of the high *chabutra*-platform on which the tomb is raised, and the paving of its top surface with stone to match the old fragments remaining *in situ*. The refacing with plain dressed ashlar masonry of the ruined exterior walls of the tomb is in progress; while the interior will be repaved with dressed stone. No new carved decoration is being executed in the refacing of this tomb, and the work is strictly limited to the provision of plain ashlar masonry, in which the main offsets and projections alone will be repeated.

" On my visit in February 1923, a scheme was prepared for the appropriate layout of the enclosed area in which the monument and the adjacent tomb of Adil Shah are contained. This will involve the closing of the modern entrance cut into the compound wall and the opening up again for use of the original main gateway to the north of the area.

Khimlassa.

" In completing the conservation work in progress on the early Mughal remains at Khimlassa in the Saugor District a sum of Rs. 520 was spent during the year; the total cost of the work amounting to Rs. 1.520 against an estimate of Rs. 2,436.

" The greater number of the monuments are located in the old fort; and among these is the Dargah of the Panch Pirs, a small structure of real architectural merit, simple in outline and characterised by an elaborate treatment of relief carving and perforated stone screens delicately wrought and inset in panels in its square columnar sides. The façades are shaded by a wide continuous *chajja* carried on lintels and ornamental brackets. Unfortunately the tomb is now bereft of its original dome, which was shattered by lightning some years ago. Conservation involved the replacement of broken pieces of *chajja* on all four sides, the renewal of a broken *jali* panel and a couple of fractured lintels, as well as the removal of modern rubble-walling above the *chajja*, and its replacement by a plain ashlar parapet. The broken top of the tomb was also made watertight and jungle growth removed.

Nagina Mahal.

" The Nagina Mahal close by (Pl. XXII, fig. *a*)—with its architectural features so reminiscent of the remains in Akbar's famous city of Fatehpur Sikri, near Agra—was the object of an estimate amounting to Rs. 965 framed by the Public Works Department for executing such repair as will arrest its further dilapidation: but the Executive Engineer concerned subsequently reported that, in his view, the monument was past repair. As a result of the Archæological Superintendent's visit in February 1923, however, certain alternative structural expedients have been suggested for the preservation of the old ruin, and it is hoped it will yet be possible to save it. It would be a pity, indeed, to let the monument collapse; for it is a feature of much interest in the fort remains, and stands out very prominently in any distant view of the city.

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"The main entrance gateway of the inner citadel a structure distinguished by an unusual horseshoe shaped opening of corbel construction, inset in a deep recess in a façade shaded by a wide *chajja*—is also a noteworthy feature of the group of monuments maintained in repair; while another monument within the citadel, also kept up, is the large well : a curious structure in which a natural depression in the rock has been further excavated to form a large square reservoir enclosed by *kangura*-capped walls. A stepped descent cut in the natural rock of one side affords access to the well; while architectural interest is lent to the interior by the addition of a simple pilaster-set façade with a boldly projecting verandah; though this last feature has now fallen.

"It may be remarked that the old city of Khimlassa, which is contained within an outer fortified wall, is of peculiar interest, in that the original streets and houses of the Mughal period are, in many cases, still extant, and are occupied by the villagers of the present *basti*. There are few places in India where this feature survives so relatively intact.

"Also of the Mughal style and reputed to date from the reign of Jahangir, the Idgah and a small three-domed mosque—the latter within the town, and the former some little distance outside it—were also under repair. In the Idgah damaged masonry was repaired and the stone paving made good where broken; while a broken *chajja* was renewed and a new entrance gate provided in the case of the mosque. Jungle growth was also removed from both structures and notice boards under the Ancient Monuments Preservation Act erected, the cost of this work being included in the sum above mentioned.

Ghogra-Khapa.

"On the Mahadeo Temple at Ghogra-Khapa in the Nagpur District a sum of Rs. 168 was spent in continuing the repairs in progress from the previous year, for which an estimate of Rs. 911 was sanctioned. The cost of the work to date amounts to Rs. 692.

"The temple, a plain square structure of low massive proportions and solid walls, now bereft of roof and tower, appears to be ascribable to the early mediæval period. Constructed of large dressed blocks of stone, its ponderous aspect is slightly relieved by simple mouldings and fillets incised in the low squat pillars and pilasters that are a feature of its entrance front. The temple is peculiar in being wholly devoid of sculptural ornament.

"The work on it comprised principally the securing of disturbed facing-masonry, the building up of fallen quoins, replacement of missing roof slabs, and the repair of paving in the interior; while the existing railing of iron-posts and stretched wire is being strengthened and a new gate fitted to it, and the immediate vicinity of the temple cleared of loose stones and débris.

Sirpur.

"At Sirpur in the Raipur District a further sum of Rs. 1,530 was spent towards the construction of a shelter for the protection of the sculptures — Buddhist, Saivite, Vaishnavite, some 200 in all—recovered from the surrounding jungles and collected in the vicinity of the Lakshman Temple. The temple is an early structure of finely

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cut brick reputed to date from the 9th century, its square *sikhara* (which is practically all that now remains of the shrine) being distinguished by a treatment of elaborately ornamented bands, broken laterally around a series of five shallow vertical facets, alternately wide and narrow, into which each front is divided. The spire itself is decorated with a series of superimposed *chaitya* shapes, its extreme angles being similarly ornamented with a vertical sequence of attached *amalaka* forms; while the whole structure is set up on a high plain *chabutra* of stone. The temple itself was thoroughly repaired a few years back; and the sculpture shed under construction is a building of brick piers roofed in nine spans with concrete on brick jack-arches between R. S. beams, and set up on an old *pakka* platform measuring some 70′ × 35′. The cost to date of constructing the shed, which was commenced in 1920-21, amounts to Rs. 3,405, the estimate for the work being Rs. 4,349.

Ratanpur.

"The repair of the Kanthi Dewal at Ratanpur (Pl. XXII, fig. *d*) in the Bilaspur District, was carried to completion at a cost of Rs. 108, the full cost of the work amounting to Rs. 327. The temple, which is a later mediæval structure of elongated shape, square in plan and two storeys high, is surmounted by a tall pyramidal roof of eight sides. The façades are relatively plain; and the attached columns and pilasters, and the small *mihrab*-shaped niches with which they are relieved, are curiously reminiscent of early Mughal design. The monument is reputed to have been built by the Haihaya (Kalachuri) rajas of Ratanpur, a dynasty which seems to have originated in the 10th century A. D., and to have lasted till the 12th. It was a branch of the celebrated Kalachuris of Chedi, whose kingdom was approximately co-extensive with the modern Central Provinces, and who at one period, in the early 11th century, extended their dominion as far as Tirhut, in Bihar (*vide* Duff's *Chronology*, pages 26 and 293, and Smith's *Early History of India*, page 312).

"The work embraced the dismantling and re-erection with the old stones of the balcony windows projecting on the south and west sides of the structure; the filling of cracks in the domed ceiling internally, and the weather-proofing of the top with concrete; the grouting of hollows and open joins in the walls, and the repair of the floor. The surrounding platform was also made good; and jungle growth, both on the shrine and in its immediate vicinity, eradicated.

Pali.

"Another monument under repair was the Mahadeo Temple at Pali in the same district. The temple is the only one extant of a number of shrines situated on the sides of a fine tank; and is remarkable for a most elaborate treatment of carving and miniature sculptures in the interior of its *mandapa* which covers walls and dome in extreme profusion. Similar carving appears again on the exterior of the *sikhara* where the original facing still exists in the lower half. The upper portion of the *sikhara* facing, with the exception of the crowning *amalaka*, has largely disappeared, and has been replaced with plainwork to keep the fabric watertight. The exterior facing of the *mandapa* again is for the most part gone, and has been replaced by plain dressed stone. The whole structure is raised on a stone plinth, and in its original entirety was distinguished by a treatment of dominant horizontal bands of carving and mouldings broken around the several projecting facets vertically dividing both *sikhara* and *mandapa*, the curving sides of the tower being treated at the corners with a vertical succession

of little attached *amalakas*. The temple was built in the 12th century by Jajalladeva, the third of the Haihaya line of Ratanpur, whose name is inscribed on it in three places. The conservation work on the temple, which was completed at a cost of Rs. 45 during the year, embraced the correction of certain deficiencies of a previous repair; while blocked up windows in the *mandapa* were opened out again, and the precarious masonry of their jambs and head was supported on new ashlar piers and steel joists. The removal of mortar promiscuously smeared over the old structure, and the general tidying up of the site, were further items of this work, the estimated cost of which amounted to Rs. 125 against an actual expenditure totalling Rs. 137. **Central Circle. Central Provinces.**

" On the completion of the repair of the Adbhar Temple also in the Bilaspur District, a sum of Rs. 159 was spent this year; the total cost of the work amounting to Rs. 442. The temple, which is also ascribed to the Haihaya kings of Ratanpur, is now a complete ruin, only the sculptured door jambs and lintels of three doorways and a few columns of the *mandapa* remaining extant. A distinctive feature of one of these relief sculptures is the large snakes that trail up the jambs and meet over the centre of the lintel, while on the inner jambs of the same doorway is a delicately cut floral decoration. Though the temple is so completely ruined, the sculptured fragments remaining are considered of sufficient interest in themselves to warrant the conservation of the monument. *Adbhar.*

" The works executed comprised the erection of neat masonry buttresses to support the old piers, and the underpinning of a couple of columns and the jambs of one of the doorways. The floor in the interior has been laid with paving stones, and holes in the existing concrete have been filled; while earth accumulation was removed and jungle growth eradicated.

" At Semarsal, also in the Bilaspur District, a sum of Rs. 151, against an estimate of Rs. 125, was spent in constructing a simple shelter over a stone inscribed with so-called Pali characters. It has not yet been possible for me to visit the locality, and no satisfactory estampage has yet been obtained of the epigraph; but from the information at present available the record seems possibly to be one of value. The stone has been notified under the Ancient Monuments Preservation Act, and the shelter now constructed over it will ensure its preservation from the effects of the weather. *Semarsal.*

" Another monument under conservation was the fort of Deogarh on which Rs. 1,063 was spent during the year. *Deogarh.*

" Picturesquely situated on an isolated hill of the southern range of the Satpuras, about 24 miles south-west of Chindwara, the fort comprises a defensive wall enclosing an area about half-a-mile long by some 200 yards wide, with a sheer descent of some 700 yards into the valleys around it. Within are some stone tanks and buildings, the principal being the Badal Mahal or cloud palace, and the Naqqarkhana or entrance gate. The latter, which stands out prominently in any distant view of the fortress, is a square structure of two storeys, the lower containing the high pointed-arched gateway framed in a flat panelled architrave, and flanked by smaller openings above the arch springing; the upper storey taking the form of a smaller square pavilion,

Central Circle. Central Provinces.

surmounted, by a dome, and shaded on each face by a projecting *chajja*. The pavilion rises from the centre of the gateway below, the roof of which forms a terrace around it on all four sides.

" A prominent feature of the Badal Mahal is its fine octagonal domed hall, the walls of which, internally, contain deep vaulted recesses in four of the sides. A number of small featureless chambers adjoin to the west; and to the north of the hall there is a large courtyard enclosed on two sides by an arcaded *dalan*.

" Local tradition ascribes the founding of the fort to the Gaoli princes Ransur and Ghansur, who preceded the Gonds; but the existing buildings are of Muhammadan style, and are attributed to Bakht Buland, a Gond convert to Islam who lived about 1700 A. D. Bakht Buland was the first Deogarh prince of importance; and his sojourn at Delhi in the service of the Emperor Aurangzeb, apparently stimulated in him a taste for architecture, which manifested itself in the construction of the fort, and its palaces. He subsequently asserted his independence, but the kingdom of Deogarh which he founded came to an end less than half a century later when Chindwara was absorbed in the Bhonsla Raj of Nagpur.

" The structures under repair included the Naqqarkhana, and the royal seat in the ruined throne room. The work was largely comprised by the removal of the dense jungle growth covering the fort walls and the buildings contained within them; while roofs were made watertight, simple underpinning executed, and in the case of the Naqqarkhana, certain of the missing cornice stones were renewed to match the existing ones *in situ*, the loose masonry being secured, and broken plaster protected with a fillet of mortar run around the edges. The estimate sanctioned for this work totals Rs. 3,412 and the sum expended to date amounts to Rs. 2,060.

Chanda.

" The City Wall of Chanda is another monument maintained by the Archæological Department, and on its annual repair, comprising the eradication of jungle growth and the weather-proofing of the gates, a sum of Rs. 500 was spent.

" Chanda town lies in the angle formed by the junction of the Erai and Jharpat rivers, and is surrounded by a continuous line of battlements over seven miles in length, which constitutes perhaps the most striking example of Gond methods of fortification that has come down to the present age. The walls are surmounted by a heavy crenellated parapet; they are 10 feet in thickness, and along the top runs a broad rampart broken down in places but on the whole in fair preservation. Four gates pierce the circuit, one to the north called Jatpura, Vinba or Ghornaidan towards the west, Achaleswar to the east, and Pathanpura to the south; in addition to these there are five wicket gates or *Khirki* named Chor, Vithoba, Hanmant, Masan and Bagad. The walls were probably founded about the middle of the 13th century by the Gond Raja Khandkia Ballal Shah; and they were kept in defensive repair by the Mahrattas during their occupation of the district. Of recent years the fortifications have been extensively repaired by the Public Works Department. The gateways are good specimens of Gond architecture. They conform to the conventional arrangement of all such gates, and comprise a central passage two bays in depth, flanked by small internal guard-rooms

and entered through a high pointed-arch, set within the square frame of a flat architrave. This latter feature is invariably embellished with a pair of small isolated heraldic emblems placed about the level of the arch abutments, one on each side. The heavy loopholed crenellations of the lower flanking walls are carried continuously across the higher gateways, rising in steps on either side to negotiate the difference in height.

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" The Gond dynasty of Chanda is traditionally believed to have originated with one Kol Bhil—a man ' great in wisdom and strength ' who welded the scattered tribes of Gonds into one nation, perhaps in about the 11th century A. D. It fell before the Mahratta Bhonslas in 1751, the last Gond king, Nilkanth Shah, dying a prisoner in their hands. Originally petty chiefs of a savage tribe, the Gond rulers spread their sway over a wide dominion, reclaiming and peopling the wild forests in which they dwelt and, save a nominal allegiance to the Delhi throne, preserved their soil for several centuries inviolate from foreign rule.

" When at length they fell, they left, on the whole, a well-governed and contented kingdom, adorned with admirable works of engineering skill, prosperous to a point no after-time has reached. The device of the Gond kings was a *singh* or lion destroying an elephant, and probably had reference to their family name of Singh. This crest is carved on wall and gateway and tower whenever the Gonds held sway, and is to be seen far beyond the boundaries of the present Chanda District: though it is very doubtful if its occurrence in certain distant localities as, for instance, Konarak and Bhuvaneshvara in Orissa, and Nalanda in Bihar, can be associated with a Gond domination.

" In 1818 Chanda fell to the besieging British, the regular garrison dying to a man in its defence: and by 1853 the rule of the Bhonslas finally came to an end with the lapse of the Nagpur Province to the British Government.

Berar.

Balapur.

" Towards the conservation of the fort at Balapur in the Akola District for which a Special Repair estimate of Rs. 8,700 has been sanctioned, a sum of Rs. 278 was spent during 1922-23.

" Balapur is mentioned in the *Ain-i-Akbari* as one of the richest *parganas* in the Berar Subah ; and it is therefore probable that the town existed long before the Mughal invasion, though no earlier record of it exists. Under the Mughals it was the chief military station of Berar after Ellichpur ; and Azim Shah, son of Aurangzeb, is said to have lived here and to have built a mud fort. The present fort of Balapur was finished, according to an inscription on the outer gate, in 1757 by Ismail Khan, the first Nawab of Ellichpur under the Nizam of Hyderabad. It is massively built of brick, and crowns a small hill at the junction of the rivers Man and Mahais, the waters of which practically surround it in the rains.

" The fort walls are in two main tiers, and are strengthened by a circular bastion at each salient angle, intermediate bastions occurring at intervals in the lower circumvallations. The walls are crowned with *kanguras* and are further pierced with numerous loopholes for the discharge of missiles from the ramparts behind. There are three gateways into the fort, one within the other. The middle gate is provided with doors studded with long spikes to resist attack by elephants ; while the innermost

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is ornamented with small figures of elephants and a horse and with floral designs. Inside the fort, originally, is said to have been a mosque; but whatever old buildings there were are now no longer in existence, and apart from the remains of an old step-well recently disclosed, only the circumvallations of the fort survive relatively intact. The buildings which now occupy the interior are the modern Tahsil offices and residences, and one or more schools; and conservation is therefore confined to the fort walls and the old well.

"The works in progress include the rebuilding of the fallen bastion at the N.-E. corner of the outer fortifications up to a sufficient height to support a stone-pitched earthen slope to be constructed behind it. This method of repair is much more economical than reconstructing the whole bastion, while equally efficacious for the security of the adjoining walls; and though restoration of the complete bastion would doubtless be more effective aesthetically, the primary consideration of economy precludes it. Another fallen bastion and a length of adjoining wall on the west side of the fort are to be similarly dealt with; while the mounds and uneven ground within the inner fort are to be levelled and cleared. A notice board warning the public against offences under the Ancient Monuments Preservation Act will also be erected at the entrance gate.

"The step-well or *baoli*, which has latterly come to light in the northern part of the fort, is buried to a depth of some 10 feet as a result of natural earth accumulation through many decades. This *baoli* is to be excavated completely, and a margin of ground of some 6 feet cleared, to expose the old approaches to it. The area will then be enclosed by a railing of angle-iron posts and stretched wire. The considerable depth of earth which intervenes between the present ground level of the fort and the uppermost floor of the well suggests that this latter feature may be much earlier in date than the fort itself in which it is contained; for it is doubtful if an accumulation of 10 feet of earth could have occurred naturally within the hundred and sixty odd years that have elapsed since the building of the fort.

"The conservation of the *chattri* of Raja Jai Singh in the vicinity is also provided for in the same estimate. The Raja is said to have accompanied the Emperor Aurangzeb on his campaigns in the Deccan; and the *chattri* ascribed to him is a structure of pleasing design which takes the form of an open *baradari* of 12 columns surmounted by a dome. A square porch with a smaller dome projects from the centre of each of the four sides, effectively elaborating the design, and the whole structure is mounted on a high *chabutra*. The open façades are shaded by a continuous *chajja* which returns around their many projections; while the parapets above are crested with *kanguras* in relief. The repairs comprise the replacement of the fallen slabs of this *chajja* and the filling of cracks in the domes; the provision of a stone railing along the outer edge of the platform on which the *chattri* stands; and the construction of a foot-path thereto, with a sign post, from the Dâk Bungalow near by. A Protected Monument's notice board will also be erected at the *chattri*.

Sindkhed.

"On the repair of the Old Tank at Sindkhed in the Buldana District, a sum of Rs. 995 was spent against a sanctioned estimate of Rs. 1,428.

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"The structure is ascribed to the Jadhao family, which held possession of the pargana of Sindkhed from about the middle of the 16th century down to the year 1851, when they were dispossessed as a penalty for an act of rebellion by Arab troops under their command. The family is celebrated as having given in marriage to the Mahratta Shahji a daughter who subsequently became the mother of the famous Sivaji; though, notwithstanding the connexion, the Jadhaos were steady Imperialists throughout the wars between Mughal and Mahratta, and held high rank in the Imperial army.

"A feature of the tank is a high masonry embankment, which holds up the water used for irrigation purposes in the fields below. The *band* contains a well surmounted by a domed pavilion; and also a sluice, controlling the outflow of water, which is reached by a flight of steps. The conservation of the monument involved the repair of the rear wall with similar stone masonry; the renewal of broken steps down to the sluice, the filling of open joints in the dome over the well; making good the broken concrete on the top of the *band* wall; and generally removing loose stones and rubbish from the interior.

Narnalla.

"The Narnalla Fort, built upon an isolated hill in the Melghat where the Satpura range enters the Akola District, was also under conservation in the year under review. The present structure, comprising an upper and a lower range of fortifications, is entered through a series of four separate gateways. It probably dates from the time of the Bahmani Sultan Ahmad Shah Wali, who is stated by Ferishta to have repaired the walls in 1425 A. D., though they are recorded again to have been repaired in 1487 by Imad-ul-Mulk, who asserted his independence of the Bahmanis and founded the Imad Shahi dynasty of Berar (1484-1572). To him is also ascribed the erection of the fine Mahakali Gate (Pl. XXII, fig. *b*), the fifth and innermost gate of the fortress of which, perhaps, it is the most noteworthy feature.

"This gateway, though deficient in defensive strength, is an exquisite piece of architectual design, and consists of a dual arch of pointed form framed in a square architrave decorated with *paterae* of carved arabesque, and surmounted by a broad band of incised Arabic inscriptions; a smaller inscription occurring again below in the tympanum of the upper arch. The upper epigraph records the date 892 H. (=1487 A. D.) and invokes divine blessings on the five legitimate Khalifas of the Sunnis; while the lower mentions the name, and gives incidentally an erroneous pedigree of the Bahmani ruler Mahmud Shah (Fath-ullah Imad-ul-Mulk). Crowning the gate is a line of ornamental *kanguras*; and on either wing project small rectangular bays, relieved with oriel-balconies shaded by deep *chajjas* on ornamental brackets; while a subsidiary storey above them is panelled with perforated stone screens. In front of the gate a colonnaded quadrangle of coarse workmanship has been subsequently added impinging on the wings of the gateway proper, with the apparent intention of strengthening the structure against attack.

"The Narnalla Fort figures largely in the political history of Berar, and we read of its being besieged by the Sultan of Ahmadnagar in 1572 when the minister Tufal Khan, who had usurped the throne of the Imad Shahis, refused to join the great confederacy of the Muhammadan kings of the Deccan.

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"The fort fell through the successful corruption of its defenders by the besieging Sultan; and on the ensuing death of Tufal Khan, Berar became a province of Ahmadnagar, which it remained till its cession to the Mughal Empire in 1595 in the reign of the Emperor Akbar. Thus Berar became once more an appanage of the throne of Delhi, as it had been before the revolt of the Deccan in 1347 under Hassan Gangu, the founder of the Bahmanis. Narnalla was again the scene of strife in 1598 when the Emperor's famous Deputy Abul Fazl captured it from the officers of the Ahmadnagar king, who had remained in occupation. In 1748, while the Deccan was virtually independent again under the Nizam Asaf Jah, the fortress was held, along with Gawilgarh, by the Mahratta Bhonslas of Nagpur as a guarantee for their levy of *chauth* on the Berar revenues. It remained in their possession till 1822 when the Melghat and its two fortresses, Narnalla and Gawilgarh, were restored to the Nizam of Hyderabad. In 1853, with the rest of Berar it was assigned to the East India Company, and so came directly under British rule.

"The works in progress for the preservation of the fort have now been carried to completion at a cost of Rs. 1,988. They included the clearance of dense jungle from the several more important gates of the fort, as well as from a small mosque in the interior where whitewash has also to be removed; while a couple of platforms previously built to support old guns have been stripped of their conspicuously modern cement-plastering, with a view to harmonizing them with their surroundings, and the joints in the masonry exposed beneath have been suitably secured. Open joints in the old remains generally have been filled and made weather-tight and earth accumulation about the Delhi Gateway has been removed.

"A bulging parapet on the Shah Nur Gate, by which one first enters the fortified area, was dismantled and rebuilt with the old stones, and some loose masonry of the interior vaulting was made good.

"The total cost of the work, which has now been completed, amounts to Rs. 3,765 against a sanctioned estimate of Rs. 3,111; a sum of Rs. 1,988 having been expended during 1922-23.

"In addition to the above, a sum of Rs. 137 was spent on the annual maintenance of the fortress. the work being chiefly comprised by the continual eradication of jungle growth and the keeping weather-tight of the buildings contained therein.

Gawilgarh.

"On the annual maintenance of the Gawilgarh Fort, located with Narnala in the Melghat (the mountainous northern tract of Berar), a sum of Rs. 425 was spent against an estimate of Rs. 615. The work consisted principally in the eradication of the all-encroaching jungle growth and in petty repairs to the several buildings in the fort area to keep them weather-tight.

"It is impossible to say when the Gawilgarh Hill was first fortified, but its name points to the probability of its being at one time, like Gaoligarh and Asirgarh in Khandesh, a stronghold of Ahir or Gaoli chieftains. The present fortifications probably date from the time of Ahmad Shah Wali, the 9th king of the Bahmani dynasty, who is recorded by Ferishta to have built them in the year 1425 A. D.

"The principle structure in the fort is the fine old Jami Masjid (Pl. XXI, fig. *c*), now sadly ruined and bereft of a great part of its prayer chamber. The monument is prominently located on one of the highest parts of the fort, and is visible from the Berar valley below for a great distance. It is raised on a high *chabutra* platform enclosed by a screen wall, which is relieved with a treatment of niches and pierced by entrance gates on the north-east and south.

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"The mosque proper, on the west side of the court, is a fine edifice of multiple arcaded bays, its open front being shaded by a bold *chajja* between narrow end pylons, imposed on which are the remains of a solitary little square *chattri* of pleasing design (Pl. XXII, fig. *c*).

"The little *chattri*, with its projecting eaves, rich brackets, and *jali*-infilled sides. is unique in being the only one of its kind still extant among the several monuments in the district which display these end pylons in their façades; such pylons being, in themselves, a distinctive feature of the local architecture. Cresting the open façade of the mosque are the remains of a few free-standing *kanguras* of ornamental pattern; and over the multiple bays of the prayer chamber is a series of small domes. The rear wall has, for the most part, collapsed—the result of an earthquake many years ago; and steps are being taken to support what remains of it on buttresses; while the disturbed masonry of the arches at the southern end of the chamber will be further supported on an inconspicuous frame of angle irons.

"The several entrance gateways of the fortifications: the Delhi Darwaza, Bara Darwaza, the Pir Fathi and another nameless gateway, are of the common pointed arch type, inset in a square architrave and surmounted by heavy *kanguras*. The Delhi Gate is, however, distinguished by representations of the emblem of the Hindu Kingdom of Vijayanagar, the *ganda-bherunda*, a fabulous dual-headed bird said to prey on elephants. This crest was carved on the gate by Fathi-ullah Imad-ul-Mulk, Governor of Berar under the last of the Bahmanis (and subsequently founder of the Imad Shahi dynasty of Berar: 1484-1572) who was himself a Vijayanagar Brahmin before his conversion to Islam, and who on attaining to virtual independence had adopted the arms as his own. Beneath this emblem is also portrayed the 'lion-on-elephant' device associated with the Gonds.

"The Pir Fathi Gate, again, on the south-west of the fort, is of interest through the inscription it contains recording the 'rebuilding with the old stones' of the Jami Masjid in the fort by Imad-ul-Mulk in A. D. 1488; while in another inscription on the Bahram bastion a further record is contained of the repair of the fort in 1577 during Sayyid Murtaza Sabzawari's Governorship of Berar under the Nizam Shahs of Ahmadnagar, to whom Berar had become subject in 1572 on the extinction of the Imad Shahi dynasty.

"The subsequent history of Gawilgarh is largely that of its companion fort at Narnalla, already briefly narrated.

"In 1803 Gawilgarh fell to the attack of the British under Wellesley, but the treaty then concluded left the fort, together with the Melghat, in the hands of the Bhonslas;

Central Circle. Berar. to whom, incidentally, is attributed the construction of the outer fortifications branching off from the Delhi Darwaza. In 1853, as already mentioned, the Melghat with the rest of Berar came into the possession of the East India Company; and five years later the Gawilgarh fortifications were dismantled, on the position being abandoned as a military post.

Lasur. "The repair of the temple of Anandeshwar at Lasur in the Amraoti District, in progress from previous years, was completed during the year under report. The monument, which is reputed to have been built by Hemadpanth, the 13th century Brahmin counsellor of the Yadava kings of Deogiri, after whom the Hemadpanthi architectural style is named, is a structure of three separate shrines disposed around a common *mandapa*, the free side of which on the north serves as an entrance to the temple. The design of the monument, of which only the lower portion now exists, is characterised by a continuous treatment of horizontal bands and mouldings, broken around the multiple facets of a vertically divided façade. The whole forms an elaborated complex, dependent for unity and coherence on its predominating horizontal lines.

"The work was principally comprised by the replacement of the missing upper course of a high stepped *chabutra* on which the triple-shrined temple is elevated; the main work of reconstructing the fallen external facing masonry of the ruined shrine itself, for which an estimate of Rs. 12,851 was sanctioned in 1914, having been carried out in former years. The cost of reconstructing the *chabutra*, on which Rs. 762 were spent in the year under review, amounted to Rs. 2,257 against an estimate of Rs. 2,132."

Eastern Circle. Bengal. "In the Eastern Circle," Mr. Dikshit reports, "the year has been characterised, in the domain of conservation, by a more extensive programme than any attempted hitherto, this being a result of the new policy of complete centralization, which made possible a grant of Rs. 32,000 for Bengal, and Rs. 9,640 for Assam. Before, however, some of the projected works could be taken in hand, the Retrenchment Committee began their sittings, and orders were issued that no works not commenced up to date should be taken in hand unless of an urgent and unavoidable nature. As a result of this, some works in Bengal were abandoned, but nevertheless a total of Rs. 23,467 was utilised, which, together with a sum of Rs. 3,108 paid to the Public Works Department as 'establishment and tools and plant' charges on works carried out through their agency, makes a grand total of Rs. 26,575, thus resulting in a saving of Rs. 5,425 out of the original grant.

"The works at Vishnupur and Bahulara in the Bankura District, and at Gaganeshvar in Midnapur District were executed departmentally by the Archæological Superintendent, at a total cost of Rs. 7,895.

Bahulara. "The most interesting new work taken in hand was the conservation of the Siddhesvara Temple at Bahulara. This is one of the finest brick temples in Western Bengal, and a remarkable example of the single-celled, tall-spired, profusely decorated type which came into vogue in these parts during the Pathan period, and which owe their

comparative immunity from Muhammadan influence to their isolated position in the midst of primitive jungle. The majority of the known examples of this class are situated in the neighbouring district of Manbhum, now included within the territory of the new province of Bihar and Orissa, and were described fifty years ago by Mr. Beglar of the Archæological Survey (Cunningham A. S. R., Vol. VIII). The excellence of the Bahulara temple lies in the character of the bands of mouldings which decorate the basement, and the elaborate ornamentations which cover the exterior surface of the temple, from the basement to the top of the spire. The hand of time has been rather heavy on the brick mouldings and decorations, but enough remains to show the elegance of conception and boldness of execution of the architects. The condition of the temple when taken on to the books of this Department in 1919 was far from satisfactory. It is situated on a low mound and was originally surrounded by eight small subsidiary temples, and enclosed by a compound wall—all of which were in ruins and could hardly be distinguished on the surface of the mound. The porch in front is a latter addition and was apparently not, as at present, a mere mass of débris when visited by Mr. Beglar fifty years ago. The side walls of the triangular opening leading to the main shrine had bulged out as a result of the pressure of the heavy superstructure, and the corbelling courses of the arch had mostly disappeared. The scheme of conservation, which was to have been put into operation during the year 1920-21, was postponed owing to the delay in the execution of the agreement with the owners of the temple. During the year under review the work was commenced early in the cold weather and nearly Rs. 1,700 were spent against an estimate amounting to over Rs. 6,000. The difficulties which those entrusted with the work had to surmount were manifold. A large quantity of plain old bricks of different sizes, and a number of moulded bricks were required for renewing the decayed masonry and filling gaps in the mouldings of both the basement and the spire. As these materials were not available from any place in the neighbourhood, it was decided to have the bricks manufactured. Unfortunately the winter rains were particularly heavy and frequent this season and several thousands of moulded bricks were spoiled before they could be put into the kiln. Later on, the discovery of several new basement mouldings in the course of clearance made it evident that the requirement of moulded bricks in the work of refacing the basement had been very much under-estimated. Moreover, the nature of the local soil out of which our proposed bricks had been moulded rendered kiln-burning unsuitable and the primitive method of preparing bricks in fire-wood kilns on a small scale was resorted to. It was thus found possible to carry on the operations of moulding, drying, shaping, and burning *simultaneously*, and a regular supply of moulded and special size bricks was thus ensured for the work. The restoration of the decayed and lost mouldings of the basement was commenced, and the bottom mouldings on the north, east and south were renewed during the year. Another important piece of work done was the refacing of the scaled-off portions of the walls of the shrine entrance, and the partial restoration of the lost corbelled archway of the same. Jungle growing in the compound was cleared and the débris scattered about was collected. The mound on which the temple stands slopes off to the level of the surrounding fields, and its excavation disclosed the fact that besides the compound wall, which ran at some distance from the main shrine and included all the subsidiary shrines, there were older structures underneath on the south side of the temple. A temporary thatched shed was built near the site for the storing of materials and implements, and a huge scaffolding is being erected to enable the remaining works on the body and the top of the spire to be undertaken in the coming season.

Eastern Circle.
Bengal.
Gaganesvara.

"Another important work undertaken was the conservation of the Karambera enclosure at Gaganesvara in the district of Midnapore which was taken in hand for the first time this year. The enclosure, now called a fort, is one of the oldest existing monuments in Bengal and was originally a Siva temple with a cloistered stone-wall enclosure built by king Kapilesvara of Orissa in or about 1450 A. D. Subsequently when this district was overrun by the Muhammadan rulers of Bengal and was annexed to Bengal (of which it has ever since remained a part) the temple was destroyed and desecrated and on its plinth a mosque was built which in its turn is now a ruin. The condition of the cloisters and the enclosure wall and gate, as also that of the mosque, had progressively deteriorated for at least four centuries before the building was declared a protected monument in 1920. As soon as the owners entered into the usual agreement with the Secretary of State, the way was opened for taking such measures as were necessary for preserving the monument to posterity. The work was commenced in February and about Rs. 1,100 were spent as against an allotment of Rs. 1,488. This was due to the particularly unhealthy and otherwise trying conditions that obtained at this locality. No local labour is available and labourers recruited from outside cannot long withstand the attacks of malaria. The transport of materials is very difficult owing to the lack of proper communications with the nearest railway station. It is a matter for satisfaction that in spite of these handicaps, considerable progress was made before the works were closed for the year. The breach in the western enclosure wall near its south end was made good with laterite blocks available at the site. The roof of the cloisters was repaired by resetting the loose stones in lime mortar, and was rendered water proof, all open joints being cleaned, filled with mortar, and finished with cement pointing. The floor of the cloisters was cleared of all infillings and earth accumulation and the plinth was exposed, where it had been covered by earth. Trees growing over the walls and roof of the mosque were removed and roots extricated from the masonry. Jungle growing in the compound was cleared, laterite stones scattered about were stacked in a corner, and the courtyard was levelled and dressed along the cloister facing. The original estimate of the Public Works Department amounting to Rs. 1,488 was found to be utterly inadequate to the requirements of the building and a fresh estimate amounting to Rs. 2,875 has been sanctioned. The principal works still left to be done are the propping up of the broken corbels of the cloister roof and repairs to the mosque.

Vishnupur.

"The largest amount of work done during the year was, however, at Vishnupur, where about Rs. 5,100 were spent, in addition to Rs. 4,000 utilised in the previous year. The work was distributed over no less than twelve out of the 17 monuments at this centre. The substantial improvement effected in the appearance and the structural strength of the buildings is illustrated by the photographs of some of the monuments reproduced in the accompanying plates (Pls. XXIII and XXIV). The nature of the work at the Ras Mancha, Radha Vinode and Murali Mohan temples was described in detail in last year's Report, but it remains to mention a somewhat difficult undertaking at the Ras Mancha this year, namely the renewal of the central dome over the sanctum. This dome originally consisted of layers of concentric rings of half bricks laid in lime mortar. The upper rings which had disappeared have now been reconstructed in cement mortar, the top being finished with beaten plaster. As the height of the walls is more than 30 feet here, the necessary centering was suspended with strong wire from above,

before the construction was actually begun. The steps leading to the plinth of the temple were also repaired, the compound was levelled and dressed, and its boundaries demarcated with masonry pillars. At the Radha Vinod temple, the only work done this year was the removal of débris in front of the temple and dressing the compound. The same measures were undertaken in regard to the Murali Mohan temple, which was further provided with a wire fencing and an iron hand-gate for the compound, together with expanded metal doors and windows for the openings on the ground floor and first floor respectively.

"The Dalmadal gun, a heavy piece of cannon lying outside the fort walls at Vishnupur, which was mounted on a platform some years ago at the instance of His Excellency the Governor of Bengal, was enclosed during the year by a wire fence in order to protect it from stray cattle and wanton mischief at the hands of boys in the adjoining school.

"All repairs necessary for the preservation of the group of temples in the jungle to the south-east of the fort at Vishnupur were completed during the year. These are all laterite structures, built in the first half of the eighteenth century (with the exception of the Kalachand temple), and are all of the same general type, in which a single cell is surrounded on all sides by verandahs with three arches, and surmounted by a tower with a polygonal plan. A number of stones from the towers of these temples were either displaced or had disappeared altogether and it was found necessary to reset them in their former position in strong cement mortar or to fill up the gaps with lime concrete.

"In the Jora Mandir group, (which consists of two large temples and one small one) and the Nandalal temple there was another perilous situation which called for prompt measures. The vaulted roofs of the verandahs consisting of huge blocks of stones to a height of 4 feet with terracing above, had either completely fallen in or were dangerously overhanging, and would undoubtedly have collapsed in the first of those earthquakes to which Bengal is periodically subject and to which most probably the present condition of the over-weighted roof is due. The handling of the displaced stones for the reconstruction of the roof was itself a task of no small magnitude. A strong masonry centering supported on temporary brick piers and thick sal-wood posts had to be constructed before the loose facing stones of the vault and the hearting of the roof could be carefully dismantled, whereafter the whole roof was rebuilt with strong cement mortar and finished with terracing. In the south verandah of the northern temple in the Jora Mandir group it was further detected that the outer wall supporting the roof was out of plumb by 6 inches, to counteract the effect of which tie rods have now been provided.

"In the Radha Madhava temple a substantial improvement has been effected by putting into proper condition the ruined gate building, the overhanging portion of which has been dismantled, while the rest has been strengthened by grouting cracks and filling gaps.

"In the Radha Gobind temple wire-netted frames have been supplied to the spire openings to prevent the bat nuisance, and in the Kalachand temple, the oldest of the jungle group of temples at Vishnupur, the disfiguring patches of cement plaster done during previous repairs by the Public Works Department were removed. The plinth

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of this temple being almost on the same level as the surrounding land, it was necessary to prevent access to the interior by the provision of expanded metal doors and windows. The compounds of most of the temples have been levelled and dressed and the boundaries demarcated.

"Of the temples in the Vishnupur Fort, the Laljee and Radha Shyam temples were under repairs this year. The former was considered by Dr. Bloch as the best example in laterite of the single-tower type. The latter, situated just opposite the Raja's residence and containing all the idols of the Raja's family, is the latest in date of all the protected monuments in Vishnupur, having been constructed so late as 1758 A. D. Its inscription slab giving the Saka as well as the local Malla year affords an important clue to the epoch of the Malla era. Only minor repairs to the main buildings of the Laljee and Radha Shyam temples, such as the resetting of stones on the spire or plinth, were necessary in these temples, and attention was primarily concentrated on improvements to the surroundings and the compound. The compound of the Laljee temple is enclosed by a substantial wall 4 feet thick, and 10 to 12 feet high, the lower portion up to a height of 5 feet consisting of laterite blocks and the upper of brickwork in lime. This wall was badly damaged on the south and west sides, where long stretches had to be entirely rebuilt, with old materials available on the spot. Laterite blocks lying about the compound were collected and neatly arranged in stacks, the compound was cleared of débris and levelled, and all jungle growing within the compound wall and outside it for some 10 feet was eradicated. The compound wall of the Radha Shyam temple, which was all but gone, has now been restored to a serviceable condition, by the removal of jungle and débris heaped along both sides of the wall, and by the renewal of the brickwork to an almost uniform height of 3 to 4 feet. The floor of the gate building was made *pakka*, suitable arrangements for the passage of rain-water were made, and wirenetted doors fixed in the tower openings.

"The Madan Mohan temple, which is one of the most ornamental and best known of the temples at Vishnupur, had some repairs carried out to its disused *Nat Mandir*. The latter building was given a further lease of life by such measures as filling large cracks with old bricks in lime mortar and grouting smaller ones, tightening arches by fixing iron wedges in cement mortar, and rendering the roof and exposed tops of walls watertight.

Gaur.

"Of the works executed by the Public Works Department, those in connection with repairs to the Chamkatti and Darasbari mosques and the Gumti gateway at Gaur in Malda District, continued from the preceding year, were brought to completion during 1922-23. The Gumti gateway is now thoroughly opened out on all sides, and the painted tiles in the newly exposed fluted pilasters are in excellent preservation. Now that the thorough repairs are complete and a wire fence has been set up around it, the Gumti gateway has become a neat and lovely addition to the group of monuments in this ancient citadel (Pl. XXIV, fig. *c*). The total expenditure on the Gumti gateway during the year was Rs. 986, *viz.*, Rs. 545 on wire fencing and Rs. 441 on other repairs.

"The repairs to the Chamkatti mosque this year comprised making the dome watertight, making good all cracks and gaps in the brick work of the wall, and

erecting a wire fencing around the building. The position of the mosque on the main road at a point which is a favourite resting place for passing bullock carts, makes the provision of a wire fence an inevitable addition.

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"In the Darasbari mosque the removal of débris and clearance of jungle have revealed the existence of what seems like a ladies' gallery with a separate passage on the north side. Besides the clearance of the débris from the interior, and repairs to the walls, etc., the boundaries of the monument were demarcated: an approach way 10 feet wide was made up to the nearest road, and a wire fence erected.

Katra. *Rajabari.* *Bakarganj.*

"Other works continued from last year were the repairs to Murshid Kuli Khan's mosque at Katra in District Murshidabad, and the Math at Rajabari in District Dacca, as well as certain works for rectifying the defects of the previous repairs to the Masjidbari mosque in Bakarganj. All these works were completed during the year, at a cost of Rs. 721, Rs. 320 and Rs. 313 respectively.

"The new works entrusted to the Public Works Department during 1922-23 include certain repairs at the Lalbagh Fort at Dacca, the repair of damage caused by a storm to the walls of the mosque at Bagha in Rajshahi District, and the conservation of the Basuli temple at Nanoor in Birbhum District.

Dacca.

"The Lalbagh Fort at Dacca was commenced by Prince Muhammad Azam, son of Aurangzeb, in 1678, and was continued by Shaista Khan, the Mughal Viceroy of Bengal, but evidently never completed. It is an interesting relic of probably the most glorious period of Dacca's history, but except for some gates and a portion of the battlemented wall not much is left. The gateway on the south is a fine two-storeyed building, with picturesque small pavilions in the Mughal style, flanked by ruined cloisters. Cracks in the pavilions were repaired, the roof was made watertight, débris and jungle were cleared from the adjoining cloisters, and a wire fence erected around the gate. The two other gate buildings on the north, which were being used as stables by the Police who occupy the fort, were vacated by them, and after such repairs as filling cracks and making the roof watertight had been carried out, they were enclosed in a wire fence. The only other work done at Lalbagh was the resetting of the displaced flags of the platform of the tomb of Bibi Peri, daughter of Shaista Khan, and wife of prince Muhammad Azam. This is the only building in the fort with pretensions to architectural merit, being square in plan with octagonal corner rooms, walls faced with marble vaults of red sandstone and a dome covered with copper sheets. The total cost of the repairs at Lalbagh amounted to Rs. 1,605.

Bagha.

"The mosque of Bagha in the district of Rajshahi is one of the two standing Muhammadan monuments in that district. It dates back to the time of Nasrat Shah, son of Husain Shah (about 1523 A. D.) as the inscriptions now preserved in the building inform us. It has five bays in the front façade and four stone pillars in the interior, on which rested five domes, all of which collapsed in the earthquake of 1897. The *mihrabs* and the face of the front wall contain some beautifully ornamented brickwork, which together with the rather heavy towers at the corners are reminiscent of the strength and restraint of the decoration at the Dakhil Darwaza, a monument most probably built about this same time. Some four years ago, the north-east minaret and the adjoining

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portion of the exterior wall of the mosque fell as a result of excessive rain. The débris was still lying in the compound until this year measures were taken to rebuild the fallen facing brickwork with old bricks available from the ruins. Only the panels, offsets, and plain mouldings were reproduced in the reconstruction of the wall and minaret. The floor of the mosque, which was uneven and allowed rain water to accumulate in the interior, was repaired by ramming brick-metal and making a passage for water through one of the door-sills. Other damage recently done by heavy rains to the compound wall of the mosque was also repaired. A total expenditure of Rs. 888 on this work has been reported by the Public Works Department as against an estimate of Rs. 1,158.

Nanoor.

"The maintenance of the Basuli temple at Nanoor in the district of Birbhum and the group of 14 other temples dedicated to Siva, together with a mound, all associated with the name of Chandidas, the well-known fourteenth century poet of Bengal, has been undertaken by the Archæological Department only recently, at the instance of the Collector of Birbhum. Some of the temples are undoubtedly several centuries old, and are of the usual single-cell, pyramidal *sikhara* type with curved cornice, decorated on the exterior with terracotta tiles and panels bearing floral designs and human figures. They are mostly in a fair state of preservation and require only ordinary measures of conservation, except the main temple dedicated to the worship of the image of the so-called Basuli or Bisālākshī, the goddess who inspired the poet's muse, which temple though rather modern, is much ruined. The front wall, as also the arches supporting the verandah, have had to be almost wholly renewed, and other minor repairs to the roof and walls have been effected. The repairs are to be continued during 1923-24, only Rs. 390 having been spent so far, as against the total estimated amount of Rs. 1,388.

Ashtagram.

"The only other item in Bengal partaking of the nature of special repairs that need be mentioned here is the work of earth-filling in the compound of the Qutb mosque at Ashtagram in Mymensingh District, on which Rs. 136 were spent. This is one of a remarkable group of five mosques of the Mughal period in the south of Mymensingh, which are typical examples of the style of architecture prevalent in this region when the centre of Mughal power in Bengal shifted eastwards.

Assam.

"The progress of conservation in Assam," Mr. Dikshit says, "was considerable, the amount of expenditure incurred being the highest ever recorded.

Tezpur.

"The scheme already in hand at Tezpur for arranging in the Municipal park the sculptures and architectural stones lying scattered in various places in the town has been brought to completion at a further cost of Rs. 2,144. Unfortunately the local planter's club known as the Chummery, did not see its way to part with the important sculptures lying on their premises, including some fluted columns, bases of pillars, and some beautifully carved lintels and door-jambs, so that the scheme had to be proceeded with without the inclusion of some of the best specimens of sculpture to be found in the neighbourhood.

Garhgaon.

"Another piece of work well-nigh finished this year was the conservation of the three-storeyed palace at the earlier Ahom capital at Garhgaon, near Nazira in the Sibsagar District. This building is of conspicuous architectural merit and it is a matter of satisfaction that it has been preserved for us, through the sacks and spoliation to which it has

been more than once subjected, and through the ravages of natural destructive agencies such as earthquakes and excessive rains, which are more actively at work in Assam than perhaps anywhere else in India. In plan each of the storeys of the palace consists of a central block (divided into apartments in the lower two storeys) surrounded by open verandahs on the sides and small rooms covered by handsome kiosks at the corners. A little over half a century ago, the site of old Garhgaoṅ was studded over with the ruins of a number of buildings including the fortified circumvallations of the town and stone gateways. Modern vandalism to which the disappearance of all these buildings is due. is also responsible for the demolition of the wall round the palace and the removal of a number of bricks from the building itself. The collapse of the northern verandah and the other damage on the ground floor has been attributed to the earthquake of 1897. Dr. Bloch's visit twenty years ago resulted in the clearance of jungle around the palace, but during the year under review, open verandahs on each floor were terraced, stair-cases were improved, hollows inside the rooms and in the compound were filled up, broken arches and pilasters in front were repaired, and the monument tidied up generally (Pl. XXIV, fig. *a*). Wire fencing and a few petty repairs only are left over for execution in 1923-24. **Eastern Circle.** **Assam.**

"The Runghar, another relic of the Ahoms lying outside the palace enclosures of the old city of Rangpur, close to the Sibsagar road, was also in hand for special repairs. This building is a handsome, oval-shaped two-storeyed pavilion, used by the Ahom king and his courtiers for watching sports and festivities going on in the plains around. Its isolated position in the midst of a vast expanse of uninhabited land affords a convenient shelter for the cattle of the neighbourhood, and there have been repeated attempts to remove the fencing and use the ground-floor rooms as a cowshed, resulting in considerable damage. This year a temporary bamboo fence was erected around the monument pending the grant of sufficient funds for the provision of a wire fence. The spalled and disintegrated brick-work of the basement of the walls and pilasters has been renewed with old bricks. *Rangpur.*

"At the monolithic remains at Dimapur some work was done during 1922-23 at an expenditure of Rs. 615. The gate leading to the enclosure where the groups of so-called 'chess-men,' 'buffalo-horn' and V shaped columns are situated, is a brick gateway in the Muhammadan style. The top of the roof of this gateway was cleared of all vegetation, earth and débris and made watertight. Trees growing within the fenced area in the enclosure were cut down, and previous mistakes made in joining the broken parts of one of the buffalo-horn pillars were rectified. The fencing was extended in places where broken stones, marking the position of individual columns in the rows, had been left out." *Dimapur.*

No Indian State within the jurisdiction of Bengal reports any expenditure on conservation of monuments, except Tripura State. An expenditure of Rs. 538 has been incurred by Tripura on the repair and maintenance of the monuments at the ancient capital at Udaipur and the rock-sculptures and images at Unakoti near Koilashahar, both of which places were visited last year by Mr. Dikshit and a conservation note drawn up for the guidance of the State officials. **Indian States.** *Tripura.*

On the conservation of ancient monuments in the Southern Circle and on the upkeep of roads connected with them, expenditure this year amounted to Rs. 19,451-5-9, **Southern Circle.** **Madras Presidency.**

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of which Rs. 18,847-8-3 was spent in the Madras Presidency and Rs. 603-13-6 in the Province of Coorg. In his note on these operations Mr. Longhurst writes :—

"The wide-reaching scheme of conservation which is still in progress among the remains of Vijayanagar, ' the City of Victory ', the birthplace of the empire of that name and the capital of its kings, continues to be based mainly on the programme sketched out by Sir John Marshall in his note of June 17th, 1903. The site is a vast one, teeming with ancient buildings covering some nine square miles, while the fortifications and outposts of the city include a far larger area. Their very multitude, however, coupled with the fact that they are too distant to be visited by many people, has demanded the exercise of very careful discretion, alike in selecting the monuments for conservation and in deciding on the measures necessary for their preservation. For financial reasons it has been impracticable to attempt to maintain any but the most important of these buildings, or to undertake more extensive repairs to even these than are absolutely necessary for their safety. During the last few years excellent progress has been made not only with the conservation work but also in providing good roads and pathways to the monuments. The latter has proved no easy task, owing to the site in most places being strewn with huge blocks of stone and débris from the numerous buildings wrecked by the Muhammadans when they sacked and destroyed the city after the battle of Talikōta in 1565. The city has been deserted ever since, and during this long period a dense thorny jungle has spread over most of the area within the fortifications and hidden many ruined building beneath. The removal and stacking of all this loose stone, and the clearing of rank vegetation, has taken some years to complete, but it is pleasant to be able to record here that this work has now been finished so far as the more important buildings are concerned. These buildings are now in a good state of preservation and their courtyards and enclosures are free from débris and jungle-growth. Many of the old roads and handsome car-streets in front of the larger temples are once again in use as public roads after many years of utter desolation. But there are still a number of ruined buildings and enclosures of minor importance which require attention, now that the conservation of the more important monuments has been completed. No costly structural repairs are called for, but it will be necessary to clear these sites in order to see what they contain and to give the visitor a better idea of the vast extent of this wonderful old city, as at present a large portion of the area within the fort is still covered with cactus and babool trees and is quite impenetrable. Owing to its situation on the southern bank of the Tungabhadra and the numerous water channels on the north side of the city, the growth of rank vegetation among the numerous buildings is very rapid, and this can be prevented only by the removal of all signs of such growth as soon as they first appear and before the roots attain alarming proportions. A special Overseer with a gang of six men to assist him has been appointed to attend to this important work, but it will of course always be necessary for an officer of this department to visit the place at least once a year to see that the buildings and roads are being properly maintained in good repair.

"Very few of the old city gateways remain. Presumably most of them were destroyed by the Muhammadans. There is one on the northern side of the fort situated on the Talarigattu road, another on the eastern side known as Bhima's gateway (owing to a big stone image of that deity being placed near the entrance), and a third has

been found hidden in jungle on the south-western side of the main line of fortifications enclosing the city. These gateways are mostly small openings spanned by stone lintels supported from below by corbels in the usual Hindu style of construction, while the superstructure is built of brick and plaster and is Muhammadan in style. Inside the entrance are small guardrooms, usually one on each side, constructed like Hindu *mandapas* and often decorated with figures of popular Hindu deities carved on the stone walls. The south-eastern gateway is unlike the other two as it is crowned with a typical Muhammadan dome, and the arch over the entrance is in the same style. It was in a very ruinous state when first discovered [Pl. XXVIII (*a*) and (*b*)]; but it is now in a good state of repair and will last for many years to come. There is, however, a lot of rank vegetation growing around these old gateways that should be removed as soon as time and funds permit.

"A sum of Rs. 1,116 has been spent on special repairs to the Vitthala temple, one of the finest monuments at Vijayanagar [Pl. XXVII (*a*)]. It was dedicated to Vishnu in the form of Vitthala or Vithoba, the latter being a deity of the Marātha country and rarely met with outside it. He is regarded as a form of Krishna. The numerous inscriptions, ranging in date from 1513 to 1564, show that the temple was commenced by Krishna-Dēva Rāya, the greatest of all the rulers of the Vijayanagar Empire, in 1513, that his two queens built the gateways; and that his two successors Achyuta and Sadāsiva, and many private individuals, made gifts of various kinds to the building. However, the temple (which is a very large one with numerous attendant shrines, cloisters, *mandapas* and huge gateways), was apparently never finished or consecrated. In all probability, the work was stopped by the destruction of the city in 1565, but tradition gives another reason and relates that it was built specially for the famous image of Vithōba at Pandharpur in the Shōlapur District of Bombay, but that the god, having coming to look at it, refused to move, saying it was far too grand for him and that he preferred his own humbler home. It certainly is one of the most ornate temples in Southern India, in spite of the fact that the roof over the magnificent hall in front of the shrine entrance was never completed, and that many of its beautiful composite pillars have been grievously damaged by the destroyers of the city. To quote Fergusson it 'shows the extreme limit in florid magnificence to which the style advanced.' The main building stands on a richly carved basement and is cruciform on plan. In front of the shrine chamber is the lofty pillared central hall with side porches and steps flanked by large stone elephants, now sadly mutilated. Perhaps the most wonderful feature of the whole building is the style of the elaborate composite pillars with clusters of little free-standing columns and conventional animals with little riders on their backs, each pillar being carved out of a single huge block of granite. The bases and bracket capitals are no less richly carved with beautiful mouldings and tiny bas-relief figures. Round the central hall and side porches and above the mighty cross beams supporting the roof-slabs is a beautifully sculptured frieze, representing, in bas-relief, scenes from the Rāmāyana. The carved ceilings, too, where they exist, are very handsome, and the size of the slabs and stone beams used in their construction is most remarkable. Another striking feature of this handsome temple is the beauty of its curved stone eaves, or dripstones as they are usually called. Facing the front entrance into the temple stands the stone car of the god. It is a very handsome little stone-built structure with beautifully carved stone wheels. Pilgrims believe that religious merit may be obtained by turning these wheels,

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with the result that the axles, which are also of stone, have been worn away to an alarming degree. The special repairs recently carried out to this wonderful building consisted in providing stone pillars and lintels to support some of the cracked stone beams within the main entrance hall, in making the roof watertight where necessary, and also providing some iron straps for certain cracked pillars in the beautiful Kalyāna *mandapa* which faces the main building and stands a few feet away to the east. In any other temple, the beauty of this *mandapa* alone would be sufficient to excite wonder and admiration in its beholder. It is a magnificent structure built on similar lines to the great hall of the main temple, and contains a stone dais in its centre for the reception of the images of the god and goddess during their annual marriage ceremony. The handsome ceiling still retains some of the original old colour work. and the pillars too seem to have been treated years ago in the same manner. This building is now in a good state of repair, but it will always require careful attention in future as some of the pillars are cracked owing to disintegration and the faulty nature of some of the blocks of stone used in its construction. The stone roof, too, appears far too heavy for the composite pillars supporting it, and sooner or later additional supports will be required if the iron straps now provided do not check the cracking of some of the old pillars.

"The new road to the Vitthala temple leading off from the main road to Talarigattu has been under consideration for some years, but although funds have repeatedly been sanctioned for this work, nothing had been done until recently owing to the difficulty experienced by the District Collector in obtaining a small strip of private land over which the proposed road was to run. At last the land has been acquired and the road has been made so that the visitor to Hampi no longer has any difficulty in reaching this monument.

"Next to the Vitthala temple, the Hazara Rama temple at Vijayanagar is perhaps the most important [Pl. XXVII (*a*)]. It is generally supposed to have been the private place of worship of the kings and the royal household. Its particularly ornate character and its close proximity to the royal enclosure seem to favour this supposition. Like the Vitthala temple, which it closely resembles in some respects, it was begun by the great Krishna Deva Raya, in 1513. Although a comparatively small building it is a very fine example of Vijayanagar temple architecture. The temple together with its attendant Amman shrine, *mandapas* and cloisters, stands in a high walled enclosure paved with stone flags, and faces the east. It was dedicated to Rama, and the beautiful bas-reliefs adorning the walls and pillars of the two shrines and also on the surface of the stone walls of the Kalyāna *mandapa*, depict a host of incidents from the Ramayana, with a few scenes from the Mahabharata. The temple is provided with a lofty porch in front which leads into a handsome central hall, the roof of which is mainly supported by four particularly beautiful and highly polished black basalt pillars, richly carved and crowned with bracket capitals. The pillars are square in section and their flat surfaces are decorated with little bas-relief figures of Hindu deities both Vaishnava and Saivite. One bas-relief represents Vishnu riding on a horse and is apparently intended for Kalki, the tenth and last incarnation yet to come, in which Vishnu will appear on a white horse with a drawn sword, to restore the rule of righteousness. The north and south sides of the central hall open out into

pillared side porches with steps leading into the paved enclosure, whilst an entrance on the west side gives access into the sanctum or shrine chamber, now empty, but which originally enshrined a stone image of Vishnu in the form of Ramachandra. The whole building up to the cornice is built of stone, whilst the tower over the shrine chamber is constructed in brick and plaster decorated with stucco figures and ornament now much decayed. The exterior stone walls of the sanctum are profusely carved with bas-relief figures and scenes illustrating incidents from the Ramayana. The Amman shrine stands on the north side of the main temple and faces the east As usual it is smaller than the latter, but the outer surfaces of the stone walls enclosing the sanctum are more richly carved and better executed. Both temples have heavy curved dripstones along the eaves similar to those adorning the Vitthala temple, and in all probability the same workmen constructed both buildings. A curious feature about the Hazara Rama temple is the elaborate character of the outer enclosure walls. The outer surface of these walls is divided into five long horizontal panels extending the whole length of the walls and filled with processional bas-relief figures of elephants, horses, soldiers and dancing-girls, representing scenes from the Mahanavami festival. The handsome stone gateway of the courtyard has been left unfinished, otherwise it would have been adorned by a lofty brick and plaster tower of the usual kind known as *gopurams* in Southern India. The special repairs carried out during the year consisted in plastering the roof to make it watertight, reconstructing a fallen portion of the compound wall on the south-western side, and supporting a stone beam in one of the cloisters. A sum of Rs. 215 was allotted for the work.

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" In front of Achyuta Raya's temple at Vijayanagar is a long and broad car-street known as the Soolai Bazaar, or Dancing-girls' Street, now converted into a rice field. The houses, which were once occupied by hundreds of dancing-girls and musicians attached to the local temples, are now in ruins, but sufficient remains to show that it must have been a handsome thoroughfare in the middle ages. The jungle that completely covered most of the ruined houses a few years ago has been removed and proper pathways have been made along the sides of the street for the use of visitors wishing to inspect the numerous ruined temples and *mandapas* along the banks of the river. At the northern end of the street is a large stone built tank with a little ruined *mandapa* in its centre and flights of stone steps all round. It was originally used by the dancing-girls who resided in this street and is now overgrown with rank vegetation and the tank is full of silt. It is an interesting and very picturesque old ruin, worthy of conservation and a sum of Rs. 139 was spent this year in removing vegetation and replacing some of the fallen blocks of stone from the tank retaining-walls and from the flights of steps. The work is nearing completion.

Masulipatam.

" In the Annual Report of the Southern Circle for 1921-22, Pandit Hirananda Sastri gave a brief account of the buildings contained within the old fort at Masulipatam in the Kistna District, which are being conserved as ancient monuments. What used to be the old Commissariat and quarters for the officers attached to the establishment, was converted into the Port and Customs Office many years ago, and this year the Arsenal has been turned into an office for the Revenue Survey Department. It is just as well that these buildings should be used for some useful purpose, as this means they will be maintained in a better state of repair than would be possible if they were

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conserved merely as ancient monuments. During the year under review the sum of Rs. 272 was spent on the fort buildings and Rs. 371 on repairs to the old Belfry and the compound wall enclosing it, both of which works have now been completed.

Gingee Fort.

"The famous fortress of Gingee is situated sixteen miles west of Tindivanam railway station in the South Arcot District. It stands on three high granite hills, connected together by lines of massive fortifications arranged in the form of a triangle. The triangular space enclosed is about three miles round and forms the inner or lower fort, with the three hills as citadels. Each of the three is fortified on all sides with line above line of stone walls flanked with bastions, fitted with gun embrasures, loop-holed for musketry, and pierced only by narrow and strong gateways. From each hill to the next connecting them together, runs a great stonefaced rampart nearly 60 feet thick with a moat 80 feet wide outside it. The lower fort is entered by two small gates, one on the north, known as the Vellore gate, and another on the east, called the Pondicherry gate. Up each of the three hills leads from the lower fort, a steep flight of stone steps built with much skill and carried either over or round such rocks and boulders as are quite unclimbable. The citadel on the north is called Krishnagiri, the one on the south Chandrayan Drug, and that on the west Rajagiri, this last being the highest and most inaccessible of the three. Rajagiri, naturally the most invulnerable part of this almost impregnable fortress, consists of a long boulder-strewn ridge which at its northern end rises suddenly into a great rocky hill with precipitous sides, the summit standing 968 feet above sea level. This was the chief citadel of the fortress and commanded the inner fort immediately below it. The latter was also surrounded by a high wall protected by bastions and a deep ditch, and the only pathway to Rajagiri leads through this lower fort and up a ridge defended by a series of curtain-walls one above the other, through which the only way of ascent runs upward to a little plateau on top of the ridge right under the vertical sides of Rajagiri; whence the path by Rajagiri itself begins. Here a steep and narrow way leads with difficulty up the hill, passing through three narrow gateways, and at length scales a mass of rock the top of which is nearly on a level with the summit of the hill. At this point is a mighty natural chasm, some 24 feet wide and 60 feet deep, separating the rocky ledge from the citadel itself. The Engineers made the only entrance into the citadel pass across this chasm by throwing an iron and wooden gangway over it. The historian Orme says of this point that it could be held by ten men against ten thousand.

"Such is the general nature of the fort, and before proceeding to describe briefly the chief buildings it contains, we may glance at the events which took place within it and rendered it so famous.

"Little is known concerning the early history of the place. The Mackenzie collection contains some MSS. concerning its origin, but these unfortunately are in the India Office and are not available for reference. Consequently, the historical information given here has been taken mainly from the South Arcot Gazetteer and from inscriptions copied by this department. Little, however, can be recounted of the fort until the sixteenth century, when it became the main stronghold of the Vijayanagar kings in this part of their empire, under them Gingee being the residence of a powerful provincial viceroy who ranked as the equal of similar governors in Madura and Tanjore. Although their successors had also some share in the matter, it was the rulers of this line who,

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constructed the greater part of the fortifications and the chief buildings contained within. Their own capital at Vijayanagar, in the Bellary District, was defended by similar works constructed on very similar hills, and both forts contain curious buildings in the Indo-Saracenic style which was clearly a fashion of the time. Moreover, they were the only dynasty which held the place in peace and quiet sufficiently long for carrying out such a vast undertaking. The inscriptions in the Venkataramana temple to be mentioned later prove that the fort was in existence in Vijayanagar days, and that the place had been made exceedingly strong before its kings were overthrown.

" After the disastrous battle of Talikota in 1565, when the Vijayanagar empire was destroyed by a combination of the Sultans of Bijapur and Golconda and other Muhammadan rulers of the Deccan, the three provincial viceroys of Gingee, Madura and Tanjore threw off their allegiance to their sovereign and assumed independence.

" About 1644, the king of Golconda, having demolished almost the last residue of Vijayanagaran power, set himself to capture the territories of these three local governors who had declared themselves independent. He began with Gingee. The viceroy of Madura, the famous Tirumala Nayak, hastened to the assistance of his Hindu comrade in the threatened fortress, and took advantage of the well-known jealousy between Golconda and Bijapur to persuade the latter to help him. Bijapur sent him a large body of cavalry, and with these and his own infantry Tirumala set out to relieve Gingee. He had hardly reached the place, however, when the Bijapur troops deserted him and joined the forces of Golconda, thus aiding in besieging the fortress they had been sent to deliver. Soon after this event the Golconda king was recalled by trouble in other parts of his new conquests, and Tirumala seized the opportunity to relieve the beleaguered fort. His men, however, being of different caste to those of the garrison, daily quarrels took place until at last a general riot occurred. During the confusion which resulted, the Bijapur troops gained possession of the fort almost without a blow and proceeded to pillage it of all the great wealth it contained. This was perhaps about 1644, and they seem to have held it uninterruptedly for the next thirty years. During their occupation of the fort, the Bijapur kings strengthened the defences, as we learn from two Persian inscriptions on the south wall of the inner fort. One of these, dated 1652, records that the Hasan bastion was built in that year, and the other, though not dated, refers to improvements made by the *qiladar* Ambar Khan.

" In 1677, the famous Maratha Chief Sivaji captured Gingee by a trick. He was nominally in the service of the Bijapur kings and drew pay from them, but secretly he nursed the ambition of driving the Muhammadans from the Carnatic and seizing the country for himself. He is said to have approached Gingee with all the outward appearance of passing through a friendly country ; and assuring the officer sent to meet him by the *qiladar* of the fort, Ambar Khan, that he, like the *qiladar*, was serving the Bijapur king, prevailed upon the old man to visit him at his camp, accompanied by his sons and relations. There they were all treacherously seized, and the great fortress fell into Sivaji's hands without a blow. Another account relates that the fort was handed over to Sivaji by the sons of Ambar Khan in accordance with a previous agreement. A letter dated 1678 by the Jesuit priest Andre Freire, printed in *La Mission du Maduré*, says that Sivaji constructed new ramparts round Gingee, dug ditches, raised towers

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and bastions and carried out all these works with a perfection of which European skill would not have been ashamed.

"In 1683 the Emperor Aurangzeb of Delhi marched to reduce Southern India to his rule, and having destroyed Bijapur and Golconda, turned his arms against the Marathas. Rama-Raja, the son of Sivaji, fled to Gingee ; and that place became a rallying point for the broken Maratha forces. Aurangzeb accordingly decided to capture it, hoping thereby not only to crush the Marathas once for all, but to obtain a strong base for his campaign in the south. So in 1691 he despatched against Gingee his General Zulfikar Khan and his own son Kam Baksh. Both of these, however, secretly hoped that if the fort was taken they would be able to establish an independent kingdom there on the death of Aurangzeb, which was daily expected, and neither of them made the slightest real effort to reduce it. In the end, Zulfikar Khan after a protracted siege seems to have persuaded Rama, the son of Sivaji, who commanded at Gingee, to hand over the fort and to retire in safety to Vellore, which was still in possession of the Marathas. The fortress, however, turned out to be so unhealthy that in 1716 the headquarters of the Muhammadan army in the south were removed to Arcot, and Gingee was ruled by a local governor appointed by Zulfikar Khan, a Rajput named Sarup Singh. During the latter's tenure of the place numerous serious troubles arose between him and the English at Fort St. David at Cuddalore. He was succeeded by his son Tej Singh, who declined to acknowledge the authority of the Nawab of Arcot or to pay him any tribute. Sadat Ulla Khan, who had been made Nawab in 1713, accordingly marched against him in the same year. The battle was fought a few miles outside Gingee and the story of the fight is a great favourite with the ballad mongers of the Southern Districts, and adorned with many poetical embellishments, is sung or acted on many a village holiday. The tale relates how Desing, as he is called in the south, invoked the blessing of the god Ranganatha at Singavaram (his tutelary deity) and set out to meet the Nawab with his army. His parting with his maiden bride is pathetically told. In the early part of the battle Desing, who was helped by his friend Muhabbat Khan, was successful, and very nearly killed the Nawab. But the Nawab's men rallied, Desing's horse was hamstrung and he and Muhabbat Khan were at length overpowered and slain. His body was burnt, it is said, on the little masonry platform which still stands on the northern bank of the Chettikulam tank in the lower fort. His girl-wife committed *sati* on his pyre, and Sadat Ulla Khan was so struck with admiration at her fortitude that on his return to Arcot he founded in memory of her the town which still bears the name Ranipettai (Queen's town) which he gave it. On the wall of the lower fort near the Pondicherry gate is a Persian inscription dated 1713 commemorating Sadat Ulla's victory over the Hindus and his capture of the fort. Two other Persian inscriptions, one on the mosque and one on the water tower adjoining it, record that these were built by Sadat Ulla Khan in 1718 and 1723 respectively.

"In 1750 Gingee was captured from the Muhammadans by the French under the gallant Bussy, D'Auteuil being second in command. Orme gives the following graphic account of this exceedingly brilliant affair :—'A detachment of 250 Europeans and 1,200 sepoys, with four field-pieces, commanded by Mr. Bussy, set out before the rest of the army, and advanced by slow marches, intending, it is probable, to attack the place by surprise ; and the main body commanded by Mr. D'Auteuil, followed at a distance of

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a forced march. When in sight of Gingee, Mr. Bussy found that 5,000 of the fugitives from the defeat at Tiruvadi had taken refuge here and were encamped under the walls, with some pieces of artillery managed by Europeans. He therefore waited till the main body came in sight, and then advanced and attacked these troops, who made very little resistance, and quitted the field as soon as Mr. D'Auteuil came up. The French took their artillery, and killed most of the Europeans who served it. They then proceeded to petard one of the gates of the outer wall on the plain (lower fort) and got possession of it a little before night with the loss of only three or four men, and the troops with all the artillery and baggage entered the town; where they immediately fortified themselves by barricading the narrow streets with the baggage-waggons, and by distributing the cannon in the larger avenues. In this situation they were exposed to a continual fire from the three mountains; the Moors likewise threw great numbers of rockets in hopes of setting fire to the combustible stores. The French bombarded the forts with mortars, and fired upon them with artillery until the moon set, which was the signal to storm the fortification on the mountains. None but the Europeans were destined to this hardy enterprise, who attacked all the three mountains at the same time and found on each redoubts above redoubts, which they carried successively sword in hand, until they came to the summits, where the fortifications were stronger than those they had surmounted; they nevertheless pushed on and petarded the gates, and by day-break were in possession of them all, having lost only twenty men in the different attacks. On contemplating the difficulties they had conquered, they were astonished at the rapidity of their own success, and the extreme pusillanimity of the defenders; and indeed, had the attack been made in day-light, it could not have succeeded.' It was an almost incredibly daring exploit, and did much to establish in the minds of the native troops of the south that terror of the French arms which stood Dupleix in such good stead during his long struggle with the English.

"In 1752, against the advice of Major Lawrence, the English resolved to try and recover the place, but the expedition proved a miserable failure and Gingee remained in French possession until after the fall of Pondicherry to Eyre Coote's force in 1761. While the siege of that town was progressing, Gingee was blockaded by a force under Captain Smith to prevent supplies reaching the beleaguered garrison; and when Pondicherry surrendered, Smith summoned the French Commander at Gingee, who was named Macgregor, to capitulate. Macgregor replied that even if Smith had a hundred thousand men it would take him three years to reduce the place, and the siege went on.

"During their occupation of the fort, the French had constructed a battery called the Royal Battery which commanded the Pondicherry gate. On the night of the 2nd February, Smith, with a small force, scaled the wall of the fort between this battery and Krishnagiri: crept unperceived through a bazaar east of the royal battery, and gained the road leading from the Pondicherry gate up to Sadat Ulla's mosque already referred to, which in those days was fringed with an avenue of trees. Here his men were perceived by the guard at the Pondicherry gate, which at once raised an alarm. Smith drove them from their post at the point of the bayonet and opened the gate and let in another body of his men, which brought his total strength up to 600. With this force he captured the royal battery. Waiting for day-light, he next drove the French out of the lower fort. Some fled for refuge to Krishnagiri, but the majority took up a position on the lower slopes of Rajagiri. From the ramparts of this and from

the hills above they kept up a continuous fire upon the English throughout the next day. That night the French retreated to the higher defences on Rajagiri and the other two hills. Next day a jemadar of the enemy's sepoys who had deserted, offered to lead a party to surprise the fortifications on Chandrayan Drug. The attack was made at night and proved successful and the hill was captured. As there was no prospect of surprising, much less assaulting, Krishnagiri or Rajagiri, it was resolved to see what a blockade would effect.

"Two months later, on the 5th April, Macgregor proposed to capitulate if his garrison were allowed the honours of war. 'Three hundred of the English sepoys,' says Orme, 'had already died in the town and in the mountain of St. George (Chandrayan Drug), from the peculiar inclemency of the air, which has always been deemed the most unhealthy in the Carnatic, insomuch that the French, who never until lately kept more than 100 Europeans here, had lost 1,200 in the ten years during which it had been in their possession. Captain Smith, therefore, very readily accepted the terms, and in the afternoon the garrisons marched out of the two mountains.'

"The place appears for the last time in history in 1780, during Haidar Ali's invasion of the Carnatic. It was then held by some of the disorderly rabble that Muhammad Ali, the ally of the English, dignified with the name of his 'troops', and, to give a stiffening to these, Ensign Macaulay had been deputed to the fort with a company of the English forces. In due time Haidar's men appeared before the place and easily carried the lower fort by assault, Muhammad Ali's men giving up their post without firing a shot. Macaulay then retired to the top of Rajagiri and assigned to his own company the post of danger in defending the way up. But the rest of the garrison mutinied and demanded that he should surrender, until at length he was compelled to capitulate. He did so on condition that he should be sent to Madras, but the condition (as so often happened with Haidar's promises) was violated, and he was despatched a prisoner to Seringapatam.

"In 1803, Mr. Garrow, the Collector, writing to the Board of Revenue upon the question of the demolition of the forts of the district, recommended that, in view of the proximity of the place to Pondicherry and its great natural strength, its fortifications 'should be totally destroyed'; but fortunately this suggestion was not adopted.

"The existing remains of the fort and its appurtenances consist of the fortifications and buildings in the lower fort and those on the three great hills already mentioned, together with the long ramparts and moat connecting them. It is unnecessary to refer to all the numerous ruined buildings which are scattered all over this large area, such as deserted shrines and *mandapas*, fallen houses and military quarters and crumbling tanks and reservoirs, but a few of the most important which are now being conserved as ancient monuments may be briefly described. Like many of the buildings at Vijayanagar, most of the temples at Gingee have been seriously damaged by treasure seekers, and parts of others have been carried away to decorate neighbouring shrines. The handsome Hindu pillars which are grouped round the large statue of Dupleix at Pondicherry were removed from Gingee. A report of 1860 records that until a few years before that date the neighbourhood of Gingee 'was considered deadly feverish, a shelter for thieves and a den for wild beasts,' and that it was whilst it 'remained an isolated

spot dreaded by all that the fort and buildings became a prey to any one who coveted the valuable store of finely worked ornamental stones ' it contained. When the fort was first taken over by this department, most of the buildings, gateways, bastions and ramparts were covered in jungle growth, and no proper roads existed. It has taken many years to remove the rank vegetation and save the chief buildings from further decay, and to provide good roads fit for motor traffic. Most of this work is now finished, but extensive annual repairs will always be necessary to maintain the place in good order, and from time to time special repairs will be required.

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" On Chandrayan Drug, the only building (besides the fortifications) is the ruined *mandapa* which can be seen from below. This is of no particular interest.

" On Krishnagiri are two large stone-built granaries with barrel-vaulted roofs constructed in brick and plaster, two *mandapas* of no special merit, a deserted temple to Ranganatha and a brick and plaster structure locally known as the Audience Chamber. The latter is square on plan and built in the Indo-Saracenic style of architecture, a style much in vogue for civil buildings during the Vijayanagar period. Its domed roof is carried on a series of graceful little pointed arches. Below the dome is a square masonry dais with a pillar at each corner, and round this runs an arcade with a balcony window on each of the four sides. It is open to all the winds of heaven and is always cool and airy and commands beautiful views of the surrounding country on all sides. It stands on a terrace which is supported from below by rows of stone pillars. the lower portion forming a kind of *mandapa* or basement hall. There is nothing to indicate that it was ever used as an Audience Chamber, but in all probability it was a pavilion used by the officer commanding the citadel on this hill, and the members of his household.

" On the summit of Rajagiri is a fairly level space covered with rough hill grass, on which are situated a ruined temple to Ranganatha, a *mandapa*, two big granaries similar to those on Krishnagiri, a masonry flag-staff from which the French flag fluttered for ten years, a big barn-shaped building of unusual design which is supposed to have been an Audience Hall, and another two storeyed building in the Indo-Saracenic style with a roofless tower and a chamber in the basement which is called the treasury. The latter building seems to have been the Commandant's residence in olden days, and the so-called treasury may have been a magazine.

" Half way up the hill, close under the sheer sides of Rajagiri. which rise like a mighty wall above it, is a very picturesque little plateau. Here, situated in a grove of ancient tamarind trees, is a quaint little shrine dedicated to the goddess Kamala Kanni Ammal, apparently a local form of Durga. To this deity buffaloes are periodically offered up at the foot of the hill beneath some shady trees to the west of the Chakrakulam tank, where are performed some of the rites connected with the sacrifices which are made to her. In front of the shrine is a stone slab about four feet square fixed in the ground so as to serve as a crude altar, and the upper surface is carved in a very uncommon manner. It bears representations of a bow and five arrows, together with a buffalo's, a ram's and four human heads, and is locally declared to refer to the sacrifices of men and animals which in olden days were made at this spot to propitiate the blood-thirsty goddess. The temple is said to have stood here long before the fort was

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ever built, and in this case tradition probably relates the truth. It is just such a wild, lonely and impressive spot as one would expect a superstitious people to invest with a holy atmosphere and connect with some terrible and mysterious deity. Close to the shrine is a natural reservoir for water deep down in the bowels of the ridge, and an artificial tank with a crumbling revetment. The fort was well supplied with tanks and reservoirs, and some of these are still retained in good repair and are used by the adjoining cultivators to irrigate their crops.

"In the last century the road from Tindivanam to Tiruvannamalai was made, and led straight through the lower fort by two big gaps made in the walls. It is by these gaps that the fort is now usually entered, the old gateways being hardly ever used except by cattle and foot passengers. Starting from the Pondicherry gate, one comes upon the remains of the military quarters built by the French when they occupied the place, and the Royal Battery which they erected on the rocky knoll above mentioned. The modern gate-piers outside the Pondicherry gateway, the curious little brick and plaster sentry-boxes and the brick embrasures which may be seen all along the chief defences would also seem to have been their work. From the Pondicherry gate a road leads westwards to Sadat Ulla Khan's mosque already referred to above. To the south of it, close under Chandrayan Drug and surrounded by the crops which now cover much of the ground within the lower fort, are the ruins of the largest temple in the fort, the one dedicated to Venkataramana. It must have been a handsome structure at one time but there is little now left in it of architectural interest. It was from this temple that the French removed the pillars for Dupleix's statue at Pondicherry, and the Jains at Sittamur in the South Arcot District, in the sixties of the last century, also removed a number of handsome pillars, stone elephants and other ornamental stones to construct a '*tér mutti*' or *mandapa* at their temple. The best of the remaining carvings are perhaps those which appear on the lofty stone door-frame of the temple gateway, which is decorated with figures representing the ten incarnations of Vishnu and popular scenes from the Ramayana.

"Outside and east of the Pondicherry gate once stood the old town of Gingee. The plan of the place given in Orme's history shows that this ran from the foot of Chandrayan Drug to beyond the gate, that it was crowded with houses and was surrounded by a wall with bastions. Not a vestige of it now remains and most of the site is now under cultivation. If one follows the forest line running under the eastern flank of the Drug one passes the remains of numerous mosques, temples and tanks, and in about a mile reaches the ruined temple of Pattabhi Rama, the second largest temple at Gingee. It is built on much the same general plan as the Venkataramana temple and is in the same style and belongs to the later Vijayanagar period. The only noteworthy feature about it is the twelve-pillared *mandapa* in front of it, which consists of a handsome stone platform 4½ feet high, on which stand twelve very graceful monolithic pillars 24 feet in height, tapering and fluted. The flat stone roof which they support is crowned with the usual brick and plaster dome-shaped *stūpi* or tower. It is a handsome little structure and is perhaps the counterpart of that from which the Pondicherry pillars were taken.

"Proceeding westwards from the Venkataramana temple, two large tanks are met with. They lie at different levels in the low ground between the Drug and Rajagiri.

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The lower and larger one is called the Chettikulam and the upper the Chakrakulam. The former is a large well-built stone reservoir with flights of steps all round, and in the northern corner of its embankment is the masonry platform above mentioned on which Desing Raja's body was burnt and his young wife committed *sati*.

" Situated on a ridge above the Chakrakulam is a prominent boulder about 20 feet high surrounded at the top by a low circular brick parapet. This is called the ' Prisoners well '. It has a natural circular hollow shaft passing through it like a well, and is about 30 feet deep. The bottom has been closed with masonry and a big natural dry well was thus made into which prisoners are said to have been thrown and left to die of starvation.

" Close to the northern gateway into the inner fort at the foot of Rajagiri, is the largest of the many big stone-built granaries within the fort. In the centre of it is a spacious entrance passage, beyond which is a room 81 feet by 28 feet and 39 feet high, on either side of which are two other rooms of the same lofty size. The walls are 5½ feet thick and the echo inside is remarkable. In the roof are round apertures, reached by narrow stone steps, for filling the rooms to the very top with grain, and round this roof is a loop-holed parapet. The stucco decoration shows that it was erected by Hindus during the Vijayanagar period. Adjoining is another great stone building with a barrel-vaulted brick and plaster roof which was either a granary or a gymnasium, and is 82 feet by 29 feet and 46½ feet high to the crown of its roof.

" Further east is a large open space that once formed the barrack square. On the north side of it is a long row of low buildings which were used as barracks and on the east side, enclosed in a walled courtyard, is the Kalyana Mahal. The latter is a curious building in the Indo-Saracenic style and resembles a gigantic dove-cote more than anything else. It consists of a rectangular court surrounded by rooms, said to have been used by the ladies of the Governor's household. In the centre of one side rises a tall tower of eight storeys, built by stone plastered over, which is about 80 feet high and is crowned with a somewhat pyramidal brick and plaster roof. The plan of each storey is the same, and consists of a small room about 8 ft. square surrounded by a little verandah built on arches; from which, on each side, two narrow flights of stone steps lead upwards and downwards. The building is fitted with earthenware drainage pipes, similar to the water pipes found in some of the Indo-Saracenic buildings at Vijayanagar and belongs to that period.

" Owing to the large number of buildings and fortifications and the vast area within to be kept free from jungle growth, it has been impossible for financial reasons to do more than maintain any but the most important of these interesting old monuments. The campaign of conservation still in progress at Gingee is based on the programme of work outlined in my conservation notes dated the 31st August 1915. Excellent progress has been made by the Public Works Department not only with the repairs but also in providing good roads throughout the fort and pathways up the three hills. A sum of Rs. 2,433 was spent on special repairs to the buildings and gateways on Rajagiri, the monuments on Krishnagiri, the Vellore Gate, Sadat Ulla Khan's Gate, the Eastern Gate of the inner fort, the Venkataramana and Pattabhirama temples and the Kalyana Mahal. The cost of the annual provision of four permanent watchmen, who look after

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the fort and roads and keep down the growth of rank vegetation from the buildings and fortifications, amounted to Rs 576 during the year under report.

Dindigul.

"A sum of Rs. 900 was allotted for special repairs to the interesting old fort situated on the famous rock at Dindigul. The estimate was framed according to my proposals and the work has been completed this year. As a brief description of the place has already been given in the Annual Report for 1921-22, by Mr. Hirananda Sastri, no further mention of this monument is necessary here.

Mahabalipuram.

"At Mahabalipuram, commonly known as the 'Seven Pagodas,' the chief work now in progress is the care of the young rain-trees planted so as to form an avenue along the road from the village to the Shore Temple. A good road has been made and the trees are receiving careful attention and are doing well and will eventually provide a shady avenue across the hot and sandy plain. The road between the Travellers' Bungalow and the 'Five Raths' is in good order and the casuarina trees planted a few years ago are now sufficiently high to afford plenty of shade across this sandy tract. The small pathways across the rocky hill where so many of these wonderful old rock-cut monuments are situated have been demarcated with proper cut stones and the paths well gravelled and rammed to prevent scouring in the rains. Two permanent watchmen are maintained to look after the monuments and roads, but provision for extra coolies for watering the young rain-trees has had to be made at a cost of Rs. 230, and their services will probably be required for the next two years.

"Other noteworthy special repairs in the Southern Circle that have been brought to completion during 1922-23 relate to the Virabhadra Temple at Motupalle in the Guntur District, containing important Chola inscriptions; the old gateway and handsome tomb of Abdul Wahab Khan in Kurnool town; the ruined Roman Catholic Portuguese Church at Porto Novo in the South Arcot District, and the Dutch cemeteries at Tuticorin and Negapatam respectively. The remaining works carried out in the Madras Presidency amount to sixty-nine different items and comprise the usual annual repairs and recurring charges for the maintenance of those monuments which have been already repaired in the past and which are now in a good state of preservation.

Coorg.

"In the Province of Coorg repairs were carried out to the fort at Mercara, the Jain temple at Mullur and the old palace at Nalknād at a total cost of Rs. 603-13-6."

Burma Circle.

The Archæological Survey in Burma continues to issue its Provincial Report separately, but M. Duroiselle has sent me the following résumé of his work :—

"During the year 1922-23 a sum of Rs. 58,484 was spent on the conservation of ancient monuments in Burma, against Rs. 56,363 spent in the preceding year. This sum is made up of Rs. 40.164 spent on special repair works and Rs. 18,320 on the maintenance of buildings already restored or preserved. A detailed statement showing the sum spent on each and the nature of the works executed is given in Appendix A. It will be seen that the works under annual repairs are only of a minor nature, and do not call for special mention. However, there is one item which deserves notice, *i.e.*, the maintenance of the palace buildings at Mandalay. As has been mentioned before in these Reports, they are built of wood, a large portion of which was obtained by dismantling the

Mandalay.

old palace at Amarapura, and one of the difficulties that officers entrusted with the conservation of these monuments are confronted with is, besides trying to arrest the process of decay of these old materials, to devise means for the preservation, as long as they can last, of the carvings on the roofs, and to arrest dry rot in the roof timbers. These old buildings have their eaves-boards placed hard up against the roof timbers, projecting upwards some 3″ to 6″ over the roofing materials. This makes a drain in which rain water accumulates together with the leaves and twigs that fall from the overhanging trees, these accumulations setting up a sort of cancer of the roof timbers. As an experiment for arresting this dry rot, the eaves-boards are now being detached from their original position and replaced about 1½″ away by means of a series of timber blocks. This will allow rain water, etc., to fall through, and leave the roof timbers unaffected. It has been found to have worked well during the last rainy weather, and unless they are examined from very close quarters, these timber blocks have in no way detracted from the view of the carvings on the roofs. It is proposed to treat in this manner all the other ornamental pieces similarly situated in the remaining buildings. **Burma Circle** *Mandalay.*

" The trustees of the Man-aung-yadana pagoda, Mandalay, with a Buddhist monk, U Yazeinda, at their head, propose, with the permission of Government, to undertake certain repairs to the pagoda and gild it with gold leaves out of funds collected from the public. This building is a protected monument and was brought on the list of monuments to be conserved by Government in 1908. It is a pagoda of ordinary type consisting of three square terraces surmounted by a bell-shaped dome and seven concentric rings of mouldings crowned by a conical finial and a *hti*, but the interest of it lies in its being the last of a long series of edifices of the same type built by the kings of Burma. It was built in 1881 by king Thibaw, the last of the Burmese kings, who ruled only for seven years (1878-1885). The main shrine was completed during his time, but the enclosure wall, which forms a necessary appendage to such monuments, was never completed. Its construction had not even been begun when the king was dethroned and removed to Ratnagiri in India, and the country annexed to the British Empire. The trustees propose to build, if sufficient funds are available, this wall also, and it is estimated that the entire work including certain minor repairs to be undertaken to the main shrine and the gilding of it with gold leaves will cost about a lakh of rupees.

" The watch tower of the palace at Mandalay has shown signs of weakness; the pillars have become rotten and loose at the joints, and some of them are now out of plumb. Fearing that it might collapse at any moment with a sudden gust of wind and be a danger to visitors, it was seriously considered whether it should not be dismantled and removed altogether. It was built in 1878 by king Thibaw soon after his ascension to the throne. It measures 79 feet in height from the ground level, and commands from its summit a very fine view of the whole of Mandalay town. The late Queen Supayalat used to have herself carried to the top whence she viewed the whole town lit up at nights on festive occasions. The tower possesses also some interest from the archæological point of view. Although it was built only during the reign of king Thibaw and was not there when king Mindon built the palace, two other watch towers exist at the old palace sites at Ava and Amarapura, and this shows that such a tower forms an indispensable part of an eastern palace. Again, the watch tower is a prominent feature not only of palaces in Burma but also all over Indo-China and the

Burma Circle. *Mandalay.* Far-East; and the palace at Mandalay will lose much of its interest if its watch tower is removed and allowed to disappear. The proposal to dismantle and remove it altogether cannot, therefore, be entertained, and an alternative proposal to preserve it as it is as long as it can last has been adopted, and an attempt is now being made to strengthen the old wooden frame-work with iron bolts and straps. It is considered that these measures will allow the tower to stand for the next ten years or so at least, by which time it is hoped that further funds may be available.

" In last year's Report a reference was made to the construction of gardens on the palace platform at Mandalay, and to the proposal of the Garden Committee to take over, from the Cantonment Committee, the gardens outside the palace platform. The actual laying out of the lawns, etc., in the gardens on the palace platform was completed during the last financial year. During the year under report the repairs to the wall surrounding the palace enclave on the west side were taken in hand, and before the official year closed the Public Works Department officers in charge succeeded in dismantling and rebuilding a part of the wall on the north side, according to the existing model. This work will be continued during 1923-24. Owing to the want of a suitable engine for pumping up water from the channels close by, there has been some delay in putting into effect the scheme for water-supply. However, it is expected that it will be an accomplished fact during the ensuing year.

" The proposal for placing the gardens outside the palace platform and those on it under one control, *i.e.*, the control of the Palace Gardens Committee, has not yet materialised. The land on which the gardens outside the palace platform are situated is, although within the palace precincts, Cantonment land, and the gardens there are being looked after by the Cantonment Committee, for which the Government of India in the Army Department are making an annual contribution of Rs. 5,000. With this amount, the Cantonment Committee pays the wages of coolies and malis employed on the gardens, and the Cantonment Magistrate, who is a Military Officer, looks after the work. in a honorary capacity. If these gardens are taken over by the Palace Gardens Committee, the Cantonment Magistrate will automatically cease his control and for the efficient management of both gardens, it is considered that a paid officer will have to be appointed in his place. Including the pay of that officer, which is estimated to be about Rs. 100 a month, and the cost of small extensions to the gardens outside the platform, it is estimated that the entire cost of maintaining the combined inner and outer gardens with extensions will be about Rs. 12,000 annually. The Committee considers that this amount is reasonable; but if, owing to the present financial stringency, Government are unable to find this sum, it will not be able to take over executive charge of these gardens. They say, however, that they will in any case be willing to act as an Advisory Committee to the authorities who are at present running the inner and outer gardens. until such time as it becomes financially possible for them to take over executive charge.

Pagan. " The works included this year under Special Repairs are mostly a continuation of those undertaken last year and the year previous. The work on the main building of the Sulamani Pagoda, Pagan, has now been completed, the only work that remains to be attended to being certain repairs to the four gateways of the outer enclosure wall and the

drainage, for which a further sum of about Rs. 3,000 is required. It will be interesting to give at this stage a brief account of this building. It was found in a bad state of repair, and was probably more or less in that state when Yule saw it in 1855. The brickwork of the upper part was much dilapidated; the crowning stupa had disappeared; and only a part of the *sikhara* remained. On this account, a doubt has been entertained whether this building had ever been completed. That it was completed is, however, certain, as we know from a history of the building, given in a stone inscription, which clearly states that it was completed and has been in occupancy for a long time; this inscription is still *in situ* within the precincts of the temple. As it is an important one, I give here a translation of the portion which relates to the history of the building. It says: 'On Thursday, the third waxing of Tazaungmon, 545 Sakkaraja,* King Sithu, whose glory is as resplendent as the rays of the sun rising over Jambudipa, and who is like unto a *deva*, visited Tuyin (a hill which is situated) in the east (of Pagan). and seeing something luminous on a spot (at a distance) asked (his attendants) if it was a fire. They replied that it was; but the king thought otherwise and knowing that it was the light emitted from a jewel, he mounted his elephant, proceeded towards the spot, and marked it as a most noble one whereon a temple should be erected. Subsequently, the articles to be enshrined were buried underground, and a temple was built over them. When the first storey was completed, images (of Buddha) were placed in it. Then a second storey was added to it, and images were placed in it, likewise * * * When the whole building was completed, the king entered the temple, and stationing himself in front of the image (of the Buddha) invited the monk Maha * * * and poured out the water of dedication'. Then follows a list of the lands dedicated to the temple for its maintenance 'so that it might last throughout the 5,000 years of the Religion'.

Burma Circle.

Pagan.

"Sithu or Narapatisithu, the founder of the temple, is one of the favourite kings of the Burmese, and like Anawratha, Kyanzittha and Alaungsithu, his predecessors, he is reputed to have been a great traveller and builder. He reigned at Pagan from 1173 to 1210 A. D., and the temple itself must have been built about 1183 A. D., the year mentioned in the inscription, in which these events are said to have taken place.

"The temple consists of two principal storeys, being set back one behind the other, and each is crowned by terraces ornamented with battlemented parapets and small stupas at each corner surmounting a deeply moulded cornice set with glazed plaques of different sizes and patterns. In plan each storey is a square, each side measuring 171 feet and 97 feet respectively, and four porches facing the cardinal points project from each, the porch on the east face being larger than the rest (Pl. XXXII). A vaulted corridor whose width ranges from 8′ 6″ to 4′ 6″ and whose height varies from 13′ to 28′ 6″ runs round a central pile of solid brickwork in the ground storey, and a deep recess built into the side of the wall of the projection on the east face contains an image of the seated Buddha placed on a pedestal. The statues on the other sides are placed on pedestals built against the side of the walls without any recess. The upper storey is raised to a height almost equal to the ground storey, and access to it is gained by two narrow flights of steps, built in the thickness of the walls below, and two broad ones leading from the first terrace above the roof of the east porch of the ground storey. (Pl. XXXII, fig. *a*).

*M. R. Diwan Bahadur L. D. Swamikannu Pillai Avergal, author of "Indian Chronology" and "Indian Ephemeris" says that in A. D. 1183-84 Karttika sukla 3 began on Thursday, 20th October at 48 (11 hours 30 minutes) and ended on Friday at 48 (10 hours 30 minutes).

Burma Circle. An image-chamber formed in a recess on the east side of the central block, with a vaulted corridor running round it, forms the interior of that storey.

"That the walls and vaults were originally covered with fine frescœs is attested by some traces of them which may still be seen in the soffit of the arches. Those on the walls have now been obliterated and covered over by new ones, which are of an inferior style, and which were executed barely one hundred and fifty years ago by some monks residing in the neighbourhood.

"The whole building is well lighted with doorways the outside of which are ornamented with flamboyant pediments crowned by miniature stupas. A view of the temple after repairs is given in plate XXXIII, fig. (*a*); figs. (*e*) and (*f*) in the same plate show part of the plinth wall and a window at the ground level. Yule cannot be far wrong when he says that 'no one of the remaining structures gives so vivid an idea of what these buildings must have been in the brilliancy of their original condition. The plaster work of the pilasters and mouldings which remains is of a highly florid and artistic character, the battlemented crown of the parapet is set with large tiles embossed and enamelled in colours, the panels of the basement with small tiles in the form of diamonds, rosettes, and other ornamented patterns and in the flamboyant rays and spires of the pediments even up to the highest remaining terraces the tips were composed of pointed glazed white tiles, which must once have given an extraordinary lustre and sparkling effect to the elevation * * * which in point of fact, must have been made in simulation of the rays of that luminous object mentioned in the inscription as having attracted the attention of the King, the founder.

"What the remaining portion of the *sikhara* and the stupa, which once crowned the temple, looked like may be judged from those of the Gawdawpalin temple, a building of the same type, which was built by the same king a little later and completed by his son and successor, Nandaungmya (1210-1234 A. D.).

"An enclosure wall, which is remarkable for the beautiful finish of the brickwork on its surface, surrounds the temple. One of the weaknesses of these structures is the want of bonding between the facing and the core. Although stones, some of which are of considerable length, were introduced at intervals to act as binders, the core of these walls was invariably set in mud mortar, and there is no proper bond. The consequence is that when the surface bricks give way, it does not take long for the whole edifice to collapse. The surface bricks in the present instance are fortunately found still intact, and only a slight damage has been done to the whole wall. They were planed and rubbed to a smooth surface and laid with very little or no mortar. Their joints are very fine and are hardly perceptible.

Mrohaung. "The conservation work at Mrohaung in Akyab District continued during the year. The Trustees of the Shitthaung Pagoda succeeded in collecting by public subscription a further sum of Rs. 2,700, and with the aid of the balance of the Rs. 2,500 contributed by Government, after deducting the liabilities incurred by the Public Works Department, they succeeded in rebuilding the fallen arch at the north-east corner of the corridor-passage and making that part of the roof water-tight. The repairs to the subsidiary stupas have also been completed, and the débris in the courtyard in front of the temple cleared.

With a view to making the building water-tight, the Overseer in charge has put a layer of cement concrete and plaster on the roof of the building on the north side. At the same time the holes on the sides of the dome have been filled up flush and covered over with plaster, and the top of the *sikhara* evened and crowned with a layer of concrete. These measures have greatly altered the character of the monument, and it is to be feared that they will all have to be re-done as soon as funds permit." **Burma Circle.**

No conservation works were undertaken departmentally in Rajputana except at Ajmer, where a wicket was replaced by a turnstile in the compound of the *barahdari* on the Anasagara Bund, and improvements were effected to the doors of the Rajputana Museum. The former work was carried out in order to prevent stray cattle from entering the Daulat Bagh from the Anasagara tank and damaging the gardens and buildings. The Daulat Bagh contains a long range of marble pavilions and *barahdaris*, standing on a marble platform with a balustrade of the same material, constructed by the Emperor Shah Jahan on the edge of the Anasagara tank. A garden is maintained here, which, together with the white marble pavilions forms a very picturesque scene, although the tank has now dried up and seldom contains any water. The improvements to the doors of the museum consisted in the replacement of old door-leaves with stronger new ones and providing the windows, etc., with iron gratings. The Rajputana Museum is situated in the magazine buildings built by Akbar, and contains many interesting exhibits including many ancient sculptures, old coins, inscribed copper-plates, old arms, etc. A recent attempt at burglary made it desirable to strengthen the doors and windows. **Indian States. Rajputana.** *Ajmer.*

Of the Indian States within the Rajputana area only two report any conservation carried out by them independently. Udaipur State sends a long list of monuments thus repaired, namely, Rikheshvara Mahadeo temple, Ambamata temple, Baijnath Mahadeo temple, Devi temple, Ramnath Kund, Jagmandir and Jagnivas water-palace Rajsamand, Jaisamand and Udaisagar; while the Jodhpur Durbar informs me that in their territory special repairs were effected to only the Theras and Chatris of Rao Amar Singh-ji and his family at Nagaur. **Udaipur State. Jodhpur State.**

Khajuraho, the capital of the Chandella Dynasty from the 9th to the 13th centuries, possesses still in its ruined and neglected condition a wonderful group of some 30 temples erected mainly in the 10th and 11th centuries of our era, which Sir John Marshall described in a former Report* as "unrivalled in point of form and richness of carving by any other group of kindred monuments in India" (see Plates XXXIV, XXXV and XXXVI). In the same Report for 1904-05 Sir John stated that a careful programme of conservation had been drawn up by himself and Mr. Cousens, which measures were subsequently carried out under the supervision of Mr. F. Manley, then an Engineer of the Panna State, the work extending over a number of years from 1904 to 1910 and involving an expenditure of some Rs. 91,000, Rs. 47,000 of which was contributed by the Government of India, the balance being spent by the Chattarpur Durbar in whose territory the monuments lie. In 1914 Mr. J. A. Page, then Assistant Superintendent in the Western Circle, inspected the works and framed proposals in a Conservation Note dated the 23rd December. As it appeared, **Central India.** *Chhatarpur State. Khajuraho.*

* *Vide* Annual Report for 1904-05, page 5.

Indian States. Central India. however, that towards the end of his otherwise excellent work Mr. Manley had gone further than his instructions in the direction of restoration. the proposals submitted by Mr. Page suggested to the Durbar that more work was being recommended than would suffice to meet the requirements of the case, and Sir John Marshall accordingly re-visited Khajuraho in February 1918 and framed final instructions on the basis of Mr. Page's note. In the Director General's Report for 1920-21 it is stated on page 11 that the Chattarpur Durbar had spent Rs. 1,480 against the estimate framed on Sir John's recommendations, but added that the programme of work on this famous group of monuments was a very extensive one, and could not be taken in hand very actively until the services of a competent Overseer could be secured. The Overseer in question was appointed at the end of 1920 in the person of Mr. B. L. Dhama, a former scholarship holder in this Department, and it was noted in the Departmental Report for 1921-22 that the work of conserving and restoring the Khajuraho monuments had continued under his supervision throughout the year. At the time when this work was commenced the monuments of Central India and Rajputana were under the general superintendence of the Archæological Officer at Poona, and one or more visits of inspection were accordingly paid to Khajuraho by Mr. R. D. Banerji within this period. As, however, a difference of opinion arose between Mr. Banerji and Mr. Dhama as to the need for dismantling the ruined *sikhara* of the Duladeo temple, the instructions of the Director General were called for. Sir John Marshall being unable to visit Khajuraho personally at the moment, the Deputy Director was sent in his stead, with Maulvi Zafar Hasan, Assistant Superintendent for Central India and Rajputana. and their report was submitted to Sir John Marshall in March 1922, whereupon final instructions for the completion of the work were framed by the Director General and transmitted to the Chhattarpur Durbar. The estimates which Mr. Dhama was executing embraced minor works on a number of temples, but the principal items on the list were the conservation of the Duladeo or Nilkanth Mahadeo temple and the Jatkari temple. Recommendations for the repair of the latter monument had been framed many years previously by Mr. Cousens but had not been carried out, although unfortunately a certain sum had been wasted on unnecessary carvings in preparation for the work of repair. The walls of the shrine both inside and outside were in a fairly good condition, but most of the *sikhara* had fallen. and the side porches of the *mahamandapa* were so badly ruined as to make the preservation of that portion of the structure a difficult work. The roof also required to be lightened by removing as much as possible of the rough core of masonry outside and the ceiling as well called for repairs and for water-proofing. One of the questions which the Deputy Director was asked to discuss with the local authorities was the treatment of the fallen *sikhara* of this temple, there being some difference of opinion as to whether the spire should be rebuilt or be preserved as it was, the latter course being ultimately recommended by the Director General. The work at the Duladeo temple was, however, more elaborate and more difficult. At the time of Mr. Page's visit in 1914 he described the *sikhara* as " a skeleton with the wrought masonry facing at the four extreme angles showing hollow and detached against the sky, the masonry facing between these curving quoins, on each of the four faces, having wholly disappeared ". The crowning *amalaka* was still in position at the top precariously perched upon a slender column of the core and the tops of the four curvilinear but now free-standing ribs at the four angles. It is not surprising that

Mr. Banerji had felt the need for dismantling this structure before attempting to consolidate the existing fabric and to re-face, but after considering Dr. Spooner's report, Sir John Marshall came to the conclusion that, provided proper scaffoldings were erected, consolidation would be possible without dismantling ; and this measure has now been carried to completion successfully. The work involved has been very extensive, as all the four faces of the spire have required to be re-faced with Panna stone, carved in outline only, with no figural restoration. Extensive work has also been required for the preservation of the *ardha-mandapa* which had fallen forward until the porch had parted from the portion behind it, whereas the niches to right and left inside the entrance had so crumbled as to leave only the image-slab in position, with the very heavy crowning-stone resting precariously above and held in position only by the uncertain weight of the stones bearing on its tail-piece. All these defects have now been corrected and the roof of the *mandapa*, which is composed of concentric rings corbelled course by course, and which was open to the sky, has now been repaired and rendered water-tight.

Indian States: Central India.

These two items, the Jatkari and Duladeo temples, were the main items on Mr. Dhama's programme, but in addition the measures recommended by Sir John Marshall with a view to strengthening and preserving the platform of the Brahma temple have also been carried out. This temple is an ancient shrine, older than most of the Khajuraho monuments, and situated on the edge of a tank the waters of which had undermined its foundations, with the result that the platform had subsided in places and the whole temple threatened to topple over towards that side.

The recommendations framed by Sir John Marshall in 1918 have now been brought to completion, and the works were duly inspected by Maulvi Zafar Hasan in March 1923, which is the reason for describing them at such length in the present Report. But a few minor measures of repair which are still desirable at a number of the monuments comprised in the group have been embodied in a supplementary Conservation Note drawn up by Mr. Dhama, and it is hoped that it may be possible to fund these in the near future, the expense to be divided equally between the Chhattarpur Durbar and the Imperial Government as in the case of the more elaborate works now at length brought to a successful issue. The expenditure in 1922-23 was Rs. 17,930 of which Rs. 11,919 were drawn from the funds provided by the Government of India.

It should also be noted that advantage of the recent work at Khajuraho has been taken to have a careful survey of the monuments carried out, and an adequate series of ground-plans and sections prepared by a competent draftsman from Jaipur working under Mr. Dhama's supervision. It is proposed to supplement these measured drawings by an extensive photographic survey, recording not only the architectural but also the main iconographic features of the monuments. This double set of records is to be used later as the basis for a scientific study of the temples in all their bearings, to be published as a Memoir of the Archæological Department.

Dhar State.

Maulvi Zafar Hasan inspected the works at Mandu between the 25th and 27th March 1923 and reports that they are in conformity with the recommendations of this

Indian States.
Central India.

Department and satisfactory as regards their quality, but he desires to protest at the slow rate of progress which is evidenced. In 1922-23 repairs were effected to ten different buildings, the Jami Masjid, Mahmud Khalji's Tomb, the Jahaz Mahal, the Taveli Mahal, the Hindola Mahal, the Hammam, the Champa Baoli, the Ashrafi Mahal, Baz Bahadur's Palace and Rupmati's Pavilion, but the very fact of work being undertaken on so many structures at once is what Maulvi Zafar Hasan deplores, as it seems to him that it would be far better to bring the conservation of one or two buildings to completion instead of dissipating energy over so many at once. The result is, Maulvi Zafar Hasan reports, that there are a number of works still outstanding for which estimates were framed and funds provided several years ago, and that despite previous recommendations to correct this faulty procedure and to complete the conservation of at least a few monuments before proceeding further with the rest, nothing effective has yet been done in this direction. We understand, however, that the State Engineer, Dhar, has promised, if possible, to finish all the outstanding works during the year 1923-24. It only remains to be noted that the clearance of the underground channel at the Jahaz Mahal recommended by Sir John Marshall in January 1920 is leading to interesting results, as several new features are being brought to light. The work both here and at the Lal Bagh is still in an initial stage, and although full of interest and promise, had best be reserved for detailed description in a subsequent Report.

In an Appendix will be found a statement shewing the sums expended at Mandu during 1922-23 on the various buildings then in hand, these figures having been very kindly supplied to me by the State Engineer through the Dewan Sahib of Dhar. It will be observed that at both Dhar and Mandu a total of Rs. 6,032 was spent from Government of India funds in their hands and Rs. 4,492 from State funds.

SECTION II.

Exploration and Research.

Taxila.

For several years past the important accounts published by Sir John Marshall of his progress from year to year at the excavations of Taxila have constituted by far the most readable and interesting portions of the Annual Report. It will therefore be particularly disappointing to scholars that the present Report has to go to Press without this section. During the winter of 1922-23 so many other demands were made upon Sir John Marshall's time that no opportunity could be found for compiling his usual report on his Taxila work, before proceeding on long leave out of India in March 1923. The Exploration section of the Report must consequently bear a disappointing semblance to Hamlet with the Prince left out but it is hoped that the gap will be filled in next year's Report.

Northern Circle.
Punjab.
Kurukshetra.

Rai Bahadur Daya Ram Sahni's excavation work in the Punjab was limited to the continuance of the exploration of the mound known as Raja Karn Ka Killa near Thanesar, which had been partly examined by him in the preceding year. " The operations opened, " Mr. Sahni writes, " with a large trench on the summit of the mound where an area 125′ × 65′ came in for examination. This portion of the site would appear to have been dug into some time ago, but who did it and for what purpose is not known. The excavated soil had been left on the sides of the cutting and the first task was naturally to shift away this loose earth. The labour involved was not quite lost as it brought to light a small earthen jar containing a number of coins, 23 copper and one silver, which had been overlooked in the earlier digging. These coins on cleaning are found to include eighteen very small pieces and six larger ones. The small bits are too much decayed to yield any complete device or legend. The same is the case with four of the larger coins. The remaining two include one silver coin of the Greco-Bactrian King Hermaios and another round copper coin characterised, on the obverse, by a well defined incuse similar to that occurring on the Panchala coins. The name of the ruler which is engraved in two lines in the incuse runs *rajno yajnajitasya*. This ruler Yajnajita is not known from any other source, but to judge from the script of the legend he must have flourished about the 2nd or 3rd century A. D.

" The excavation then proceeded apace and revealed a mass of brick walls which belonged to a fairly large dwelling house (Pl. IV, fig. *b*). The back wall is about 40 feet in length and still standing to a height of 7 feet. The interior arrangement of the building is, however, rendered unintelligible by later additions and depredations, and the whole structure bears the appearance of a re-erection of material, obtained from earlier structures, possibly of the same date as the coins referred to above. The only other object found in this area which calls for special mention is a small copper vessel resembling a modern wine-glass with an elongated base.

" The rest of the operations this year at Kurukshetra were devoted to the further excavation of trenches B and C towards the east of the mound, and of the trench D on the southern slope. The long trench which was started to the west of trench B-C in 1921-22 was carried down to a depth of about 7 feet below the surface of the mound. The area proved to be devoid of structural remains of any kind, but the excavation was rewarded by the discovery of a valuable terracotta sealing which bears on

Northern Circle. Punjab.

the obverse a beautifully shaped Indian bull standing facing to the left. Above the bull is a line of five very minute letters, probably in the Kharoshthi script. This legend has not yet been deciphered. In trenches B and C the fragmentary rooms brought to light in the preceding year underwent further clearance. I had now dug as many as eight trenches in different parts of the mound, and though they had yielded some interesting minor objects, the buildings found in them were not such as appeared to justify their complete excavation. Furthermore, it would have been too costly to carry the excavation in all of them down to virgin soil, and small pits dug at convenient spots in one or two of them had failed to disclose any more valuable relics. Still it was obviously essential, for a clear understanding of the mound, to reach virgin soil somewhere and to obtain such knowledge about it as was possible. For this purpose, it was decided to dig a sufficiently large pit and the spot chosen was an area measuring about 15′ square immediately to the north of room No. 8 in trench B-C. Layer by layer the soil was removed down to the depth of nine feet below the floor level in the adjoining buildings. The excavation revealed several changes in the soil which might have been clay floors mixed with ashes and charcoal and what looked like streaks of lime. but no objects were found which might have furnished a clue to the age of the strata passed through. A thin gold wire ear-ring recovered in this pit may, however, be noticed in passing. It was now considered inadvisable to deepen the entire extent of the pit, a shaft of only five feet in diameter being considered sufficient to test the lower portion of the mound This was done, the result being the discovery, two or three feet above the virgin soil, of two wedge-shaped bricks such as have been used from the most ancient times of which we are aware on ancient sites in Northern India in the construction of wells.

" After these trial excavations carried out at the mound known as the Castle of Raja Karna in the cold weathers of 1921-22 and 1922-23 at a total outlay of Rs. 3,867-10-0 it is proposed to leave this site alone for the present. It should not, however, be understood that a resumption of excavations at some future date may not yet reveal unsuspected relics at spots in this very mound which have not been touched during the recent operations. The conclusions that can be safely drawn from the work carried out may be summarized here. In the first place it becomes obvious that what brick remains exist in the mound occur for the most part in the uppermost strata, *i.e.*, within the upper seven or eight feet of the mound. These brick remains are throughout composed of the same size of well-burnt bricks measuring 14 to $14\frac{1}{2}'' \times 9$ to $9\frac{1}{2}'' \times 2\frac{1}{2}$ to $3''$. At other ancient sites in India such bricks are generally found in the buildings of the Kushana period, and this may be the approximate date of the remains unearthed at Raja Karn Ka Killa, especially as two coins, one of Hermaios and another of a local chieftain of about the Kushana period have been brought to light in one of the excavations on this mound. These structures also appear to be ordinary dwelling houses, as no objects which could have been used for worship have so far been recovered except a small terracotta mould for casting figures of the goddess of prosperity (Srī), and the lower half of a terracotta relief which might have represented Siva and Parvati standing side by side.

" The rest of this lofty mound is to judge from the trial pit dug in the eastern portion of the site, composed of closely packed earth undoubtedly thrown up by human agency through many centuries. The mound might well date back from the

pre-Buddhistic period, and it appears a matter of great surprise that the work carried out should have failed to throw any light on the ancient traditions associated with the land of Kurukshetra. Northern Circle. Punjab.

"There are, however, other ancient sites within the traditional boundaries of Kurukshetra. A few of these were mentioned in the departmental Report for 1921-22. Two or three of them have now been inspected by the writer. The site locally known as Theh Polar is situated on the south bank of the Sarasvati river about five miles above the town of Siwan, or eleven miles from Kaithal. Close to this site are the foundations of a bridge which was built across the stream in Muhammadan times. This bridge was destroyed by the Mahrattas and a new masonry regulator was constructed near the old bridge in 1907. The Polar site is an extensive one, more than 1,500 feet in length, and thickly strewn with débris including potsherds, carved bricks and even terracotta figurines. No walls appear on the western portion of the site, but the eastern portion shows, above the surface, the remains of a large quadrangular building nearly 250 feet square, with circular towers, 18 feet in diameter, at the corners. The outer walls are about three feet thick, those on the inside being 2′ 2″ in thickness. These ruins deserve excavation.

"At the adjoining town of Siwan an ancient tank with wells at the four corners, whose construction is locally attributed to Sita, the wife of Rāma, has yielded two valuable sculptures which are now worshipped in the temple of Kashipuri at Kaithal. The larger one of these sculptures is a standing figure (Pl. V, fig. *d*), which, according to the distribution of the symbols in the four hands of the deity as given in the Agni and Padma Puranas, should be identified as the Trivikrama form of Vishnu. Of the attendants standing on both sides of the central figure, the two male figures holding a wheel and a conch respectively are two of the *āyudha-purushas*, while in the females standing next to them and holding a lotus flower and a *chauri* (?) we may readily recognise the goddesses Lakshmi and Bhumi. The *nāga* and *nāgī* standing at the extreme ends do not appear to be mentioned in the *sādhanas*. The seated figures worked out on both sides of the head of Trivikrama are Brahma Mahesa and Indra riding his elephant. The relief at the top of the slab includes a row of the seven sages all seated in a uniform posture, and another seated figure above them which may be some other aspect of Vishnu himself.

"The other image holds the mace, lotus, conch and wheel in the *pradakshinā* order and must therefore be a representation of the main Vishnu aspect. It is for this reason, no doubt, that the deity has three faces, those on the sides signifying his Boar and Lion incarnations. Figures of this kind are common in Kashmir and the other hill States of the Punjab.

"The mound at Amin about five miles distant from the town of Thanesar, the traditional site of the Chakra-vyuha castle constructed by Dronacharya, is a high and extensive site. The southern portion is occupied by the present village, but there are only a few houses on the summit of the northern part, which have been built entirely with ancient material. The only remains visible on the mound are a stout brick wall noticed here and there on the northern slope high up above the surrounding fields, and a well on the west side. The former appears to belong to the late Gupta period.

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"The exploration of this mound is bound to be a laborious and costly affair. There is, however, a smaller site situated close to a tank named Soma Tirtha, to the south of the village, which has already yielded several stone objects of interest and could be explored at a nominal cost. Two sculptured posts in red stone of the Kushan period, which must have been imported from Mathura, have been noticed in the Annual Report for 1921-22. They are illustrated in Pl. V, fig. *e*, in this volume. A search in the village brought to light three other antiquities, two of which are stated to have been found in the same mound. They are lying in the house of a Brahman of the village who could not be persuaded to present them to the Lahore Museum. One is a slab (height 3′ 3″) which must have belonged to a pillar similar to the two just referred to. The other is a round stone lid (diameter 2′ 3½″) of a large-sized stone box. The box has not yet been found, but it probably still lies buried in the same mound. The excavation of the mound will probably also reveal other posts similar to the three described above, and possibly also portions of the sacred spot or symbol around which these posts were erected. One other antiquity, the exact find-place of which could not be ascertained, though it must have come to light at Amin, is a stone slab bearing a four-armed seated figure of Ganapati with Siva and Parvati seated to his proper left. It was probably carved in the late Gupta period.

Thanesar.

"Thanesar is famous as the most sacred place in the holy land of Kurukshetra. The ancient name appears to have been *Sthānvīśvara*, *i.e.*, the god Siva. It now consists of an old ruined fort about 1,200 feet square at top, with a suburb locally known as the *Bāharī* Fort, *i.e.*, the outer fortification and the modern town, which is also situated on an ancient mound. These three mounds together occupy a space of about three miles, which closely agrees with the 20 *li* of Yüan Chwang. Tradition assigns the construction of the Thanesar Fort to Raja Dilipa, a descendant of Kuru. The existing remains, however, cannot be anterior to about the 7th century A. D., and I am inclined to judge that the fort was most probably founded by Harshavardhana, who ruled over the whole of Northern India from 606 to 648 A. D. The chief reason for this inference, apart from other considerations, is the fact that all visible structures in the fort are composed of bricks measuring 14″ × 8½″ × 2½″. The fort is said to have had 52 towers or bastions, some of which are still extant. The number of gates is not ascertainable, on account of the late renewals of the fort during the Muhammadan and Sikh periods. I have, however, definitely located one of the original gates on the west side of the fort. It consists of a broad passage flanked by solidly built brick bastions which presumably gave access to one of the main streets of the fort, as remains of buildings are clearly seen for a considerable distance along it. In the gate the passage is paved in brick laid on edge. The right-hand bastion, which was partly excavated, appears to consist of a small chamber with a narrow entrance. The rampart at this point is just eleven feet thick, and this would appear to have been the thickness of the wall on all sides. The interior of the fort is remarkably free from jungle, and several brick ruins are traceable in different parts of the site. A noteworthy mass of ruins occurs in a big depression on the south side where the walls are still standing to the level of the eaves. Some trial excavations on this site may be expected to throw considerable light on the history of the 7th century."

An even more promising site, Mr. Sahni thinks, is a mound situated about three quarters of a mile to the north-west of Thanesar, in which General Cunningham recognized

the remains of a stupa built by Asoka-raja which was said to have contained a peck measure of the relics of the Buddha, and was standing to a height of about 300 feet, when Yüan Chwang visited it. Northern Circle. Punjab.

The Superintendent visited Daulara as he was informed of the existence there of an ancient site and a large stone statue which had been found in it. The village is situated 17 miles from Thanesar, close to the road leading from the latter to Radaur. "It is difficult to say", Mr. Sahni writes, "whether this place falls within the boundaries of the circuit of Kurukshetra or not, as Yüan Chwang states it to have been only 200 *li* or about 33 miles in extent, though later writers increase it to upwards of a 100 miles. On reaching the place I found that though there was, indeed, an ancient mound near the village, it was not likely to yield important results. The image unearthed in the mound is a two-armed standing statue of Vishnu, 5′ 9″ in height. It does not appear to be more than five or six hundred years old." *Daulara.*

The town of Kangra was visited by Mr. Sahni in the course of his tour of inspection in that District in January 1923. "The temples destroyed by the earthquake of 1905 in the Kangra District were dealt with by Dr. Vogel in an article which appeared in the Director General's Annual Report for the year 1905-06. Among these was the most celebrated sanctuary of Matadevi or Vajresvari at Bhavan, a suburb of Kangra town. A new temple is now being constructed on the original site out of public subscriptions and is nearing completion. This spot would seem to have been held in considerable reverence by the Hindus from remote antiquity, and the information available about Kot Kangra and this temple from the Muhammadan chroniclers has been brought together by General Cunningham in his *Archæological Survey Reports*, Volume V, pages 265-269. The earliest certain notice is in A. D. 1043 when we are informed that a new idol of the goddess Matadevi was set up by the Raja of Delhi in place of the image which had been carried away by Mahmud of Ghazni. What the Vajresvari temple of this period was like, we do not know. The temple which fell a victim to the earthquake of 1905 was about four hundred years later in date as, according to a Sanskrit inscription built into the porch of the temple, it was constructed during the reign of Samsar Chand I, Raja of Kangra, in the first half of the fifteenth century A. D. At this period the temple was decorated with a number of Brahmanical images and some of these have been carefully rescued from the débris by the Committee of Management and deposited in one of the rooms of the large quadrangle which has been re-erected around the temple. As none of these sculptures appear so far to have been described anywhere, two of them are illustrated in Plate V. One of these (Fig. *c*) represents the goddess Durga slaying the buffalo demon, while fig. *b* may possibly represent Bhairava. A third sculpture is locally described as Durga destroying the demon Jalandhara. This demon was, according to the Puranas, the son of the Ocean and the river Gangés, but he was slain not by Durga but by her consort Siva. Consequently the sculpture in question more probably depicts the destruction of one of the demons called Sumbha, Nisumbha or Durga whom the goddess herself promises to destroy in the Devimahatmya of the Markandeya Purana. The subject is not as frequently met with in Brahmanical sculpture as, for example, the slaying of Mahishasura. In the sculpture under discussion we see the goddess, who has ten arms (*dasabhuji*), standing on the back of the demon, who is lying face *Kangra.*

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downwards. The two females standing on the right and left of the goddess are possibly two of the other goddesses who helped Durga in this achievement. The porous block of stone is a very ancient Siva *linga* which was fixed in the centre of the floor of the temple of Vajresvari and was no doubt originally the principal image worshipped in this temple. It is therefore very likely that the temple was originally dedicated to Siva himself. When and why this temple was converted to the worship of Vajresvari Devi are questions which cannot at present be satisfactorily answered."

Hansi.

" The fort at Hansi, District Hissar, yielded in March 1923 a remarkable find of five stone images which were brought to light by certain *kumhārs* engaged in excavating earth for the preparation of saltpetre, on the east side of the fort, in the space between the outer circumvallation and the inner citadel (Pl. IV, fig. *a*). The Hansi fort, which is situated to the north-east of the town, is now quite desolate, and according to Mr. Rodgers measures 370 yards from north to south and 325 yards from east to west. The outer wall of the fort has completely disappeared. Of the inner fort only a portion of the curtain wall is left on the north side together with the old fort gateway and the guard house on the south side. The monuments that exist inside the citadel are the grave of Sayyid Shahid Wali Nimat-ul-lah, a mosque and one or two other Muhammadan structures. The fort is said to have been dismantled after 1857 when all the materials were sold. At one time the Hansi fort must have been a strong fortification, for Masaud, son of Mahmud of Ghazni, failed in his first attempt to take it. It was, however, captured by him in 429 H. (1037 A. D.)*

" The earlier history of the fort prior to the Moslem invasion is hidden in obscurity and there are no inscriptions or other records which might assist in determining the date of its foundation with certainty. All the buildings, palaces, temples, etc., of the earlier period now lie buried under the later fort which was built on the site by the Afghan kings. A British officer of Hissar is said to have carried out some excavation in the middle of the citadel and the brick remains brought to light may still be seen in a pit. On the east side of the fort, in a *nala*, one may also see several walls of a large building which are still standing to considerable heights. The bricks of which these remains are composed and a number of stone pillars which have been utilized in the construction of the Muhammadan buildings appear to belong to about the 7th century A. D., that is the period of Harshavardhana or his father Prabhakaravardhana of Thanesar. It is, therefore, not unlikely that the Hansi fort, like the Thanesar fort, was also founded by one or other of these princes.

" The images recently brought to light are assignable to the tenth century or possibly a somewhat earlier date. They must have been worshipped in temples in the fort and were probably thrown out where they have just now been found, by the army of Masaud. In spite of this, the sculptures are in a very good state of preservation and were, on their recovery, secured by the Hindus of the town and are being used for worship. The question of the final disposal of this find is under the consideration of the Punjab Government.

" The most valuable of these sculptures is a standing image of the Sun-god (Pl. V, fig. *a*), which from the iconographical point of view is one of the best examples yet found

*Elliot's *History of India*, Volume II, page 135.

in Northern India. The main point of interest is the accuracy with which the artist has followed the description of the Surya image as given in the Sastras. The only omission is the absence of the one-wheeled chariot, the horses and Aruna. The height prescribed for images of the Sun is one, two, three or more cubits, each variety having its own special name. The image under reference is four feet six inches or just three cubits in height. Similarly in conformity with the *sāstric* injunctions, the deity wears a *kirīta*, a necklace over his chest, a *yajnopavīta* and a girdle (Sanskrit *Avyanga* or *Ahyanga*). It should be noted, however, that the hands of the deity which hold lotuses do not reach up to the level of the shoulders as is laid down in the *sādhanas*. On either side of the main figure, on the same base, stand three figures. Among these the figures standing next to the deity are males holding a pen with folio, and a spear (Sanskrit *sakti*) respectively. They must, therefore, be Pingala (Agni) and Danda or Dandanayaka (*i.e.*, Skanda), who were posted on the right and left sides of Surya by the gods to protect him from the attacks of *asuras*. Sometimes, as in the image of the Sun at the Black Pagoda at Konarak, these attendants hold a sword and a shield. The two females, exterior to Pingala and Danda, are two of the four *saktīs* of Surya; while the horse-headed male figures carved at the extreme ends are the Asvini *devatās* which, according to the Bhavishyat Purana, have to be shown on either side of the deity. Higher up on both sides of Surya are the females Usha and Pratyusha, who are chasing away the darkness with their bows and arrows. Above them we notice a seated figure on either side of Surya. The figure on the proper right side holds a *khatvanga* in the right hand and might represent Bhairava. The seated figures, which are partly concealed by the lotuses of Surya, are of course Brahma and Vishnu as distinguished by their respective symbols. A feature of this image which is not generally met with in statues of the Sun is the representation of the nine planets along the halo, the central figure being the Sun-god himself. The only writing on the statue is a short Nagari inscription engraved on the folio in the left hand of Pingala which may possibly be read as *Srī Ādityā-pratima*.

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"The remaining images found at Hansi include another representation of the Sun which, however, is inferior in technique and omits the Asvinikumaras noticed in the image above described. The figure seated between the knees of the main deity is probably meant for the legless Aruna. The third image (height 1′ 8″) of the lot represents Katyayani or Mahishasuramardini who in accordance with the Sastras is represented as a youthful female with ten arms. Her right leg rests on the buffalo-demon who is being attacked by her lion from behind. Her right hands hold the trident, a mirror, a wheel, a bowl (?) and a sword, and her left the *triśūla*, an uncertain object, a bow, a shield and a bell. The other two sculptures are an unfinished figure of Ganesa and a pedestal with seven miniature *lingas*."

"Bilsar," Mr. Sahni writes, "is the name of a small village situated 2½ miles south-east of Rudain Railway Station on the Mathura-Farrukhabad Branch of the Bombay, Baroda and Central India Railway. In ancient times it would appear to have been a town of some importance, as it is situated on an extensive mound, and one notices numerous fragments of statues and other relics lying about the village and in the surrounding fields. General Cunningham, who inspected this place twice,* identifies it with the

United Provinces. *Bilsar.*

**A. S. R.*, Volume XI, pages 33 ff. and plates V—VIII.

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Pi-lo-shan-na mentioned by Yüan Chwang, and this identification appears to be unquestionable. The Chinese pilgrim describes the inhabitants of *Pi-lo-shan-na* as mostly non-Buddhist, though a few reverenced Buddhism. The town possessed two Buddhist monasteries with three hundred followers of the Mahayana sect. There were also five Brahmanical temples and another old monastery in the middle of the town, within the enclosure of which stood an Asoka stupa which was in ruins in the Pilgrim's times. This last monastery General Cunningham recognises in the lofty mound which stands between the two main divisions of the village, *viz.*, Bilsar Pachhia and Bilsar Purva, or western and eastern Bilsar.

" General Cunningham dug a trench across this mound in search of the Asoka stupa, but stopped his operations in despair at the depth of 7½ feet when he had come upon several walls lying at different angles which, he concluded, were the remains of houses of the mediæval period. It is evident, however, that as the mound according to Cunningham himself is 33 feet in height, the stupa may still be found lower down when the mound is more systematically explored. This seems the more plausible as the existence at Bilsar of Maurya buildings is vouched for by General Cunningham's own observation that the walls brought to light were composed of large-sized bricks similar to those found in Asokan monuments.

" There are no surface indications to show where the sites of the two monasteries which accommodated three hundred monks in the time of Yüan Chwang lie buried. General Cunningham locates them in two extensive mounds situated to the south of the village. The only Buddhist sculpture so far brought to light at Bilsar is a stone statue (height 11¾") of the Bodhisattva Maitreya which I acquired from a Brahman of the village. The deity is standing with his right hand hanging down in the *varamudrā*, while his left hand holds as usual a *nāgakesara* flower. The back of the image bears an inscription of seven lines in early Nagari characters, which contains the Buddhist creed followed by the name of the donor, the latter being now illegible.

" General Cunningham fixes the sites of the five Brahmanical *devālayas* in mounds marked D, E, F, G and H in his plan, all of which are situated in the southern division of the village called Bilsar Patti. In one of these, *i.e.*, F, which he partially explored, certain portions of a Brahmanical temple have come down to us and will be described later on. No traces of the other temples seen by Yüan Chwang are visible above the surface. I have, however, brought to light three statues in *kanjur* stone which appear to date from the late Gupta period and might have belonged to one or other of the *devālayas* referred to above. One of these statues is a two-armed image of Siva seated on a cushion in easy posture. The head of the deity has a circular halo, while his right hand holds what appears to be a trident. His vehicle the bull is seated under his right leg. The other two images are locally called *Dulha* and *Dulhin*, *i.e.*, the 'bridegroom' and the 'bride.' In reality they seem to be Siva and Parvati. One other object of the same period that was noticed in the village is a fragmentary terracotta tile which when complete must have been 2′ 11″ long and 2′ 1″ wide. General Cunningham secured a similar tile* and suggested that it must have been the central piece of a large pavement.

* *A. S. R.*, Volume XI, plate VIII, page 3.

The large stone trough lying about fifty paces east of the site (F) also belongs to the same period.

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" The site F was from the outset a striking one on account of the existence on it of a pair of monolithic pillars bearing duplicate inscriptions of the reign of the early Gupta king Kumaragupta of the year 96 (A. D. 415-16) and another pair of square pillars standing at a distance of 85 feet towards the east. Cunningham exposed the entire existing lengths of these pillars and a flight of stone steps immediately to the west of the two square ones. He also obtained from the villagers a few terracottas. Three of these, together with one of the two square pillars, are illustrated in his Reports."

During the forty-five years that have elapsed since General Cunningham's visit, the remains at site F have become buried again under earth and other débris. Mr. Sahni had planned to clear up the whole site this year, but as the consent of the land owners was not received until the beginning of March, part of the work remained undone. The two square pillars undoubtedly belonged to a Torana gate.

" These pillars," Mr. Sahni says, " are carved on all four faces, much in the style of the Gupta pillars from Garhwan, District Allahabad, now in the Lucknow Museum. The east faces exhibit figures of the river goddesses Ganga and Yamuna, the flanks being adorned with a broad band of scroll work. The west faces are divided up into a number of panels. The lowest panel of each pillar contains a well built doorkeeper standing facing. The compartments above these depict the goddess of wealth seated on a lion, and a husband and wife respectively. The upper portions of the pillars are broken off, but a large variety of subjects are delineated in vertical rows on the margin of both pillars. One of these occurring near the bottom of the southern pillar appears to call for special notice. It represents a half-closed doorway, round at the top. A man is shown as coming out of the door and probably represents the donor of the temple to which these pillars belonged. The closed leaf bears representations of the sun and the moon which probably signifies a wish for the permanence of the building, as long as these luminaries survive.

" On the east and west sides of the pillars the excavations brought to light *pakka* floors but no portions of the temple itself, although an area equal to sixty feet by thirty feet to the west of the staircase referred to above was dug down very nearly to the original floor level. Consequently whatever portions of the original edifice may remain, must be looked for under the area to the east of the pillars, now unfortunately occupied by modern houses. In these circumstances the duplicate inscription on the two round pillars mentioned above proves very useful. as it purports to record the execution, by a private individual named Dhruva-sarman, at the temple of the god Svami-Mahasena or Kartikeya of certain works, *viz.*, (1) the building of a *pratoli* or gateway resembling a staircase leading to the heavens, (2) the establishment of a charitable hall, and (3) the erection of the columns on which the inscription is engraved. General Cunningham interpreted the passage relating to the erection of the gateway as meaning that Dhruva-sarman had erected a staircase with a gateway, and as his operations had actually revealed a flight of steps with a gateway standing at the foot of it, he concluded that

*Fleet, *Gupta Inscriptions*, p. 42 ff.

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both were co-eval. He also believed that the staircase referred to led up to a high platform on which the temple of Mahasena stood facing to the east.

"It appears futile to discuss at present the actual plan and arrangement of the temple of Kartikeya which occupied this site. What little evidence has, however, so far come to light appears to contradict General Cunningham's view. His error was mainly due to his assumption that Dhruva-sarman erected a staircase as well as a *pratoli*, though the inscription actually attributes to him the erection of a gateway only. Nor can the staircase found in the excavation be assigned to the same date as the pillars of the gateway. It is obviously a later addition which must have been provided when the ground around the temple had risen, leaving the building in a pit. And as the building was entered from the west, the sanctuary must lie in the opposite direction. This inference gains further support from the fact that the finest carvings on the pillars occur on their west sides which first met the eye of the approaching votary."

Frontier Circle. *Zaro Dheri.*

While at Mansehra in connection with the making of estampages of the Asoka rock inscriptions, Mr. Hargreaves availed himself of the opportunity of inspecting the mound of Zaro Dheri which lies some two miles north of Shinkiari and about thirteen from Mansehra, not far from the entrances to the Konsh and Bhogarmang valleys. "The mound," Mr. Hargreaves writes, "lies to the right of the village track and is surrounded by fields and detached houses which are collectively known as Tamba, Pl. VII, fig. *c*. The name Zaro Dheri or Zar-ki-dheri is said to be due to the belief held by the local cultivators that the mound contains gold, *zar*. People are said to dream of treasure buried there, and several recently excavated holes are visible which were said to be due to attempts to realize the revelations of dreams. All these diggings were reported to have been unsuccessful. The stupa must have been a very large one and rose from a high terraced platform 265′ by 180′, access to which was by way of a staircase on the south, a mass of masonry and débris still marking the site. The stupa facing seems to have entirely disappeared but there is no deep depression in the centre of the mass, and if the stupa contained relics they may possibly be still undisturbed. The base of the remains of the stupa is 165 feet in diameter and the top of the stupa some 50 feet above the level of the platform. To the north are mounds marking the walls of the monastic buildings, and in the south-west corner is a very well-built circular pit 6′ 6″ in diameter which is in all probability a well. The owner of the site, has cleared this to a depth of five feet. There are two other wells on the site, according to the villagers, but these are not at present visible. The masonry of the existing walls is of large diaper, but not of quite so fine technique as in some of the monuments of Taxila, the local stones seemingly not providing such good material for the small infilling or, at least, not weathering so well. The site lying in the midst of cultivation has suffered from the enterprising industry of the peasants, who have turned each available spot into a terraced field, the large stones of the monument providing material for the retaining walls. There is cultivation up to the very wall of the stupa platform, and all round the remains of the stupa itself, the whole area being wonderfully free from stones and indicating cultivation over a long period.

"With the consent of the Director General of Archæology the site has been brought under the operations of the Ancient Monuments Preservation Act, for the monument must have been one of the largest Buddhist establishments in this region.

" Though no coins were obtained on the occasion of my inspection, it appears that copper coins of the Kushans have been found at the site by villagers. Sculptures do not seem to have been recovered here and the ornamentation was most probably in stucco. **Frontier Circle.**

" About half a mile east of Zaro Dheri and on a steep spur which is cut off by a narrow passage on the east from the main hill, are revetment walls and traces of foundations of small buildings. Pottery fragments are numerous on the site, which is known locally as Kot Sir Kap, the villagers connecting it with Raja Rasalu and Raja Sir Kap and recounting the usual stories of these heroes. Many of the small rubble revetment walls resemble those of the ancient footpaths to Jamalgarhi and Takht-i-Bahi. Other and larger ones are of small diaper masonry and are revetments of small terraced areas on which formerly rose buildings of which only traces of foundations now remain. The largest wall which crowns the hill top has, on the western face, several semi-circular pilasters (? or buttresses) resembling those of the north wall of the Jandial temple at Taxila, but here they are of diaper masonry, not in rubble. The spur is such that it can never have given accommodation to any very large number of persons, nor have been the site of any important buildings. It is steep and as already stated, detached from the adjoining hill, but it is by no means very difficult of access and cannot have been a fortification. Although the site seems to have been occupied by secular buildings (for there are no traces of stupas or chapels) no coins are said to have been found there although the villagers reported finds of coins at various other sites in the neighbourhood. *Kot Sir Kap.*

" Walls of rough rubble, but small and covering but little ground, are said to exist in various spots on the neighbouring hills.

" The site is noted in Rodger's *Revised List of Objects of Archæological interest in the Punjab (1891)* as No. 9 of the monuments in the Hazara District, but is there confused with the more extensive remains at Bedadi some four miles to the south, and Rodgers would appear to have obtained his information from Azam Beg's Settlement Report on the Hazara District, 1874, where the same confusion of sites appears.

" On the open plain some two miles north-east of the main group of monuments at Takht-i-Bahi lies the village of Kot. The upper and eastern part of the village is built on a mound which marks an ancient site, and traces of walls and revetments of an early date are visible in several places. The village is said to receive the name Kot, *fort*, because it has on three sides the natural defences of deep ravines; on the west and north that of the bed of the Bagiari, now, in consequence of the opening of the upper Swat Canal, a perennial stream, and on the east a dry *nala* which receives the drainage from the north side of the Takht-i-Bahi hill. *Kot.*

" On the 10th October 1922 M. Dilawar Khan, Custodian of the Peshawar Museum, who was on leave, heard of a find of sculptures at this village and brought to Peshawar Malik Abdul Matlib, one of two brothers on whose property the find had been made. The *malik* stated the sculptures had been recovered when levelling a courtyard in order to extend his house. He was requested to stop all further operations until the site could be inspected and also to protect the sculptures from damage."

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Mr. Hargreaves reports that he visited the spot personally on October 19th, 1922, and found that the corner of a stupa base, about seven inches in height, had been disclosed. Six feet of one face and sixteen feet of the other had been exposed. The extremities of these two faces were not traceable as they ran under certain of the malik's buildings. To clear the face of the monument would have necessitated demolishing a small prayer platform and other structures. It was considered unwise to attempt this as it could not have failed to antagonise the *malik* as well as the villagers in general, many of whose houses must likewise be built over ancient remains. Moreover so little, save the very base of the stupa, existed in the cleared area that complete excavation would not, in all probability, have revealed more than the plan of the structure.

" The plinth still preserved its plain stucco facing and a torus and scotia moulding and, from a break four feet behind the northern face, it was plain that the stupa had been enlarged at some early period. It was in removing the earth around this stupa base that the two interesting sculptures detailed below, numerous small fragments of large stucco figures, and three damaged stone reliefs had been found. Had complete excavation been insisted upon the result would have been the concealment of future finds, and the destruction of antiquities in order to prevent possible interference with private property. It is essential that the active co-operation of the villagers should be secured, and so the *maliks* were permitted to continue their building operations on the understanding that the disclosed remains should be covered up and not destroyed. By this action the department has secured the good will of the villagers and may hope to have finds freely reported in future. They willingly made over the sculptures to Government and were given a suitable reward. The Assistant Commissioner, Mardan, approved the action taken, and the co-operation and ready assistance of the *maliks* has been specially commended to his notice.

" The sculptures of special interest are :—

Syama Jataka.

(*i*) A relief 26½" × 7" depicting four scenes from the Syama Jataka (Pl. X, fig. *d*). The story reads from left to right and the fragment is, in all probability, the riser of a step. On the left (A) is seen the king of Benares lamenting the fate of Syama whom he has accidently shot. To the right of this (B) are seen the two leafy huts, *parnasala*, in the forest, where the blind parents of Syama practise their austerities. The next scene (C) shows the king leading the blind parents to the scene of the fatality. The suggestion of the blindness of the parents is most cleverly depicted and sketched from life. On the extreme right (D) the mother, seated on the ground, bewails her dead son, whose head is supported by the father.

Taming of the Serpent in Kasyapa's Monastery.

(*ii*) Sculpture, 25' × 11". The Buddha presenting the conquered snake in his alms bowl to Kasyapa (Pl. X, fig. *c*). Both hands are lost but there is no doubt as to the identification. Kasyapa is depicted as the typical *parivrājaka* and is attended by a Brahman youth with *kamandalu*. The extreme popularity of this scene in the Gandhara school has yet to be accounted for, and is worthy of investigation.

" The Buddha figure in this relief presents a point of interest, as it is believed to be the only example known in the school—save in certain reliefs of unidentified legendary

scenes—where each foot is shown on a separate lotus. The excessive height of the Buddha is nothing exceptional, but the ornamentation of the two clearly defined portions of the pedestal is noticeably different, and we have here another example where a breakage at the point of junction would give a complete icon with hardly any suggestion of its true origin. **Frontier Circle.**

Khalo.

"Lieutenant-Colonel James, C.I.E., Deputy Commissioner, Hazara, forwarded to the Superintendent, Frontier Circle, on the 28th February 1923, a report in the vernacular which he had received from the Superintendent of Police, Hazara. This report had been forwarded by Sher Mohamed, a Head Constable then on leave. The latter stated that in his village of Khalo a *mochi* when digging a place for his shop had discovered some heads, ' like those found near Jaulian by the officers at Taxila ' and that thinking these heads might be connected with Taxila figures, he had stopped further digging until he received orders. He added that the heads would be produced when required.

"This report was interesting as showing how the Taxila monuments, which he must have visited some time, had impressed the constable. His recognition of the figure as being of the Gandhara School did credit to his powers of observation.

"The Assistant to the Superintendent, K. B. Mian Wasi-ud-din, inspected the site on the 21st March 1923 and reports that the village of Khalo is one mile south of Ghazi, a well-known village on the left bank of the Indus. Khalo lies due east of Hund (Ohind) in the Peshawar District (the ferry and ford on the old highroad to India), but higher up the river which here bends sharply to the west. Khalo, therefore, lies close to the old road from the Indus to Taxila which is about 30 miles to the south. The present village is situated on the left bank of a dry *nāla* which drains into the Indus. The site is obviously ancient, being considerably higher than the surrounding country. The village *mochi* whose house is on the eastern edge of the village, had dug an irregular hole with a view to making a small *tahkhana* for a workshop. In this digging nothing was found, but on levelling a small space in front of this hole and towards the *nāla* he found some stucco figures and a few decorative details, but unconnected with structures of any kind. K. B. Mian Wasi-ud-din, however, discovered some 20 feet to the south a piece of Gandhara walling and exposed it for some 10 feet until it terminated in the slope of the *nāla*. As this wall was slightly curved he made search further down the *nāla* and 70 feet away found what seemed to be a continuation of the same wall, with a corresponding curve. If these two fragments are, indeed, part of the same wall they mark the foundations of what must have been a very large stupa. Houses cover the area under which the base of the stupa would continue and render impossible further search for any existing remains.

"Local tradition has it that many figures in stone and stucco were found here fifty years ago and destroyed as relics of idolatry*. The fact that this particular find was reported is, therefore, all the more gratifying. The three heads which have been obtained for the Peshawar Museum are :—

(*i*) Buddha head, height 6", hair treated naturalistically.

(*ii*) Bodhisattva head, height 4", with high headdress.

(*iii*) Head of layman, height 3". Nose very slightly damaged.

*In Azam Beg's *Settlement Report Hazara District, 1874*, it is stated that a stone idol and other stone *buts* were found on a mound at Khalo in the time of Major Abbott, but no information is given as to their disposal.

'rontier Circle The heads are of excellent technique and wonderfully preserved and rank among the finest ever recovered. Traces of red colour still exist on the eyes, nose, lips and ears, and a red line marks the junction of the hair and forehead. They can be attributed with some certainty to a comparatively late period of Gandhara art, as the emphasizing of the folds of the neck by two red lines links them with the Gupta School of which this is a characteristic feature.

shpola Stupa. "On the 13th October 1922, as inspection was made of the Ishpola Stupa in the Khyber. The Political Agent, Major Finnis, O.B.E., arranged for a party of *maliks* to meet me at the stupa and they rendered every assistance and talked freely about the monument, in which they seemed to take much pride. Their followers, however, were so numerous that it was somewhat embarrassing, and a smaller party would have rendered inspection easier and more thorough.

"The *maliks* seemed to be of opinion that this monument had been given by the Khyber maliks to Mr. Pears, C.S.I., C.I.E., I.C.S., when Political Agent, Khyber. They said a chowkidar had been placed in charge of the monument but no pay had been received for him.

"The Khyber railway now in course of construction runs immediately below the spur on which stands the monument. The request made by the Superintendent last year to the Local Government that no material for the railway should be taken from the monument seems to have had effect.

"The revetment on which the stupa stands is of very large stones and well built of large diaper, some of the infilling being exceedingly neatly done and well preserved, possibly due to the slaty material so easily obtainable locally. No semi-ashlar masonry was noted and the monument is assignable to about the second century A. D. Quite half of the eastern revetment and the greater portions of the southern and western revetments have disappeared, while most of the northern face is hidden under débris. Excavation might reveal parts of the revetment still in good order, and it is very probable that clearance would reveal considerable portions of the drum of the dome and possibly stucco ornamentations still in fair condition. Under the steep slope of débris on the north may still exist the remains of the staircase which gave access to the procession path. as the monastic buildings, and probably numerous small stupas were on two sites to the north. The *maliks* state that the large stones of the walls on these two sites were removed long ago for road metal, and this seems to be so, as the remaining débris is clearly the small infilling of walls and *kanjur* fragment, seemingly from small stupas. It is possible to climb to the top of the dome on the south side whence the facing has disappeared. A rough, roofless stone hut stands on the southern edge of the new flat top of the dome. Standing on this flat spot the *maliks* pointed out on the north side of the hut a spot under which they said a small chamber with large stones was discovered many years ago. They said a small reliquary of gold was found and some coins, so it appears that in this case the relic chamber was high up in the dome as was the case at the Bhallar Tope.

Frontier Circle.

" On the south side two tunnels have been dug deep into the solid mass of the monument. One, which was not explored, seemed to be a simple straight shaft, the second and larger one descends steeply towards the centre of the monument and terminates in a circular domed chamber which has been hollowed out to a considerable height and which retains its shape owing to the very tight packing of the filling of the stupa.

" The *maliks* were desirous that work should be undertaken at the stupa and promised to give every help. The monument is certainly worthy of attention, and now that the railway is being made, the site will be more accessible. Politically the conservation of the monument might be welcomed as providing, after the completion of the railway, useful work for the tribesmen, but it is feared that the work might be exceptionally costly.

Palosa Khpa.

" On the 15th December 1922 when superintending the conservation at Jamalgarhi an opportunity was taken of inspecting a site known as Palosa Khpa which lies about one mile to the east. Here on a spur overlooking the plain are the remains of three stupas and a monastery, all very much ruined and seemingly by people in search of building material. As there is no village near, the exploitation would seem to be due to the contractors who made the adjacent canal. The site might repay restoration later.

Chichar.

" The whole neighbourhood of Jamalgarhi is marked by monumental remains of Kushan date, and it is worth noting that on the north side of the Jamalgarhi hill are distinct traces of a former path, which leads to the foot of the hill to a perennial stream which flows by the small village of Chichar about one mile north-north-west of Jamalgarhi, where wallings and revetments in several places mark ancient sites. The stream was in all probability the Jamalgarhi water supply and the source whence were filled the numerous water pots and pits discovered in the recent operations. To bring water from this stream would certainly entail a stiff climb, but the establishment had doubtless an abundance of servants and possibly also slaves, while pilgrims to the shrine may have brought water as an offering. Be that as it may, water for the numerous workmen and the necessities of the recent conservation had to be brought nearly a mile, and yet five men sufficed to meet all requirements.

Mansehra.

" As I had been directed to make inked estampages of the Fourteen Rock Edicts of Asoka for Dr. Hultzsch, Mansehra was visited in May 1922. The edicts are engraved on four faces of three rocks which are in some cases very badly weathered. The making of these estampages was particularly trying for the Muhammadan members of the staff, the weather being hot and the season Ramzan. The operations took a considerable time involving as they did the making of 72 large sheets of estampages. It was so arranged that each sheet overlapped its neighbours by three inches on all sides to ensure no characters were omitted. One set of estampages was retained in the Peshawar office, the other with a key, was forwarded to the Government Epigraphist on November 8th for transmission to Dr. Hultzsch.

Shahbazgarhi.

" With the same object Shahbazgarhi was visited in November 1922. Here the edicts are engraved on three faces of two rocks (Pl. VII, figs. *a* and *b*). Duplicate

Frontier Circle. estampages were again made, but here 92 sheets were necessary, as this inscription is complete and the script is, on one face, much larger and more widely spaced. A set of estampages with key was sent to the Government Epigraphist on January 23rd, 1923, to be likewise forwarded to Dr. Hultzsch.

" On large rocks of the character of those at Mansehra and Shahbazgarhi, where the surface is uneven, it has been found best to beat in first a moistened sheet of Nasik paper and while this is still damp to beat over and into this a sheet of white printing paper on which the inked estampage is made. By so doing both a squeeze, in reverse, and an inked impression is obtained, and, moreover, the two sheets are together generally strong enough to stand the strain of an uneven surface without cracking. The estampages obtained were on the whole very satisfactory and the success attained was in no small measure due to the interest displayed by B. Mul Chand and B. Mohamed Sharif, the office photographer and office draftsman respectively.

" Each sheet of the estampages has been photographed and 82 excellent negatives obtained."

Western Circle.
Sind.
Mohen-jo-daro.

Mr. Rakal Das Banerji writes in respect of the excavations undertaken by him—
" Mohen-jo-daro is the present name of a ruined city which once stood on the banks of the river Indus, when it flowed in an old bed, much to the west of its present course. The ruins of this city lie in the Labdarya *Taluka* of the Larkana District of Sindh. These ruins cover an area of nearly 250 acres. The city was built on both banks of the river, but its principal shrines were erected on islands in the middle of it. A cluster of five shrines were built on a group of five islands, lying close together, two of which were excavated during the year under review.

" The first of these shrines (site No. I) bore on its top the drum of a stupa, built of sundried bricks. The highest point of the existing portion of this drum is about 70′ higher than the present level of the old river bed. Excavations revealed the fact that this Buddhist shrine was built on the top of a high artificial tower of burnt bricks, the side walls of which are still more than 40′ higher than the river bed. The tower is rectangular in shape and on the top of it, a quadrangle consisting of series of chambers on all four sides enclosing a courtyard with a stupa in its centre, was built. The entrance to this quadrangle lay through a pillared hall in the north-eastern corner, whence a grand staircase ran along the entire eastern façade of the tower and reached the ground level at its south-eastern corner. The courtyard inside the quadrangle is paved with bricks and in its middle there is a platform of burnt bricks, 71′ in lengths and 63′ 3″ in breadth. On this platform the stupa was built, but not exactly in its centre. There is a small porch on the eastern face of this platform, which leads to a small narrow passage, running east to west. In the side walls of this passage there are two narrow staircases, one going to the north and the other to the south, for the use of pilgrims who wanted to go up to the base of the stupa for circumambulation. Abutting on the eastern side of the drum of the stupa and at the western end of the passage is a narrow chamber which once contained a seated image of Buddha, made of clay, but with a core of burnt bricks. The sides of the platform of this stupa were stepped and were covered with ashes, proving that the shrine was destroyed by fire. The sides of the drum were originally covered with frescoe-paintings, fragments of which were discovered in the

debris on the northern side. These frescoes resemble those discovered by Sir Aurel Stein in Khotan. **Western Circle.**

"The stupa was excavated by treasure-seekers long ago when they destroyed the northern half of the drum. They found the relics and left them among the debris. The relic casket of white marble and its lid of polished conch-shell were discovered with the frescoes. Under the platform of the existing stupa a thick layer of ashes were discovered, proving that the existing shrine was built on the ruins of an earlier one.

"Buildings of four different periods were found during the excavation of the rooms of the quadrangle. The topmost walls are associated with the Siva and Bull type of thick copper coins of the Kushan Emperor Vasudeva I. They belong to the same period as the present stupa and the characters found on the fragments of frescoes agree in date with these coins. The walls of the third period are associated with a new type of thin, round, but un-inscribed coin. Below them were found walls of the second period, with which thousands of thick oblong copper coins were discovered. These coins resembled the indigenous issues of the ancient city of Taxila and do not bear any punch marks like ordinary *Karshapanas*. They bear only one device on one side, *e.g.*, the fire-altar, a seated nimbate deity, a dwarf or human figures. The walls of the earliest period and a pavement were found below the level of the ashes over which the platform of the stupa was built. Four thick oblong copper coins inscribed with pictograms were discovered at this level.

"The finds in site No. I consist of flint scrapers, cores, bouchers, dice of polished marble and terra-cotta, fragments of a marble chairs, pieces of small images and umbrellas of white marble, oblation vessels of conch shell, bangles and ornaments of conch, beads of various stones, copper and bronze, pipes of cornelian and pottery of various shapes. The entire area of site No. I was covered with funeral urns of various sizes and shapes. The majority of them are pointed at the bottom but some of the larger jars are round. These contained smaller but pointed funeral urns and miniature necropolitan pottery. In room No. 3, on the eastern side of the quadrangle, numerous fragments of images of stucco, turned into porcelain by the action of intense heat, were discovered at the level of the walls of the third period. Among them was found the bearded head of a barbarian wearing a pointed cap, similar to the figure discovered in one of the monuments at Taxila.

"The most important discovery of the season was a seal of soap-stone, found on the staircase on the river-side, at the bottom of the eastern retaining wall of the tower. This seal bears in the centre the figure of a one-horned quadruped, which has been identified by Dr. D. B. Spooner as the unicorn. The fragment of a similar seal was discovered in a drain at the same place and a third specimen was discovered on a small shrine to the north-east of site No. I. These seals bear ideograms or pictograms like the seals discovered at Harappa.

"The excavation of the second shrine, on the larger island, revealed the ruins of another stupa and its attached monastery. These two buildings were also built on the top of a high artificial tower, the retaining walls of which are still 44′ in height. One room of this monastery contains a beautiful low altar made of small glazed bricks with very fine joins. A similar feature was observed in a shrine attached to the south side

Western Circle. of the stupa. More than 300 large and small round relic caskets of white marble were discovered in a tunnel bored by the treasure-seekers under this stupa. Flint scrapers, cores and coins of Vasudeva I were also discovered on this site.

"No Muhammadan coins were found on any of these three sites excavated during the year under review, proving that the site was deserted long before the Muhammadan conquest of Sindh in 711 A. D. All three sites yielded numerous fragments of painted pottery, some of which are as thin as egg-shell-china. The most favourite designs were painted in pure white on a deep-red slip or in chocolate-brown on a milk-white slip. Numerous miniature figures of animals were discovered along with inkpots, lids of vessels and urns, potters knobs and crude dolls. Fragments of glazed and enamelled ceramics were discovered in site No. I only."

Central Circle. **Bihar.** *Nalanda.* Mr. Page reports that a sum of Rs. 4,750 has been spent in continuing the excavations at Nalanda during the year under review. "The site of this famous Buddhist University has been described in previous reports," Mr. Page writes, "and it will suffice here to mention that the area extends some 1,600 feet N-S by 800 E-W and contains the remains of numerous brick stupas and viharas beneath its many débris-strewn mounds; a prominent feature in the general arrangement of the site being the long main central avenue traversing it north to south, which separates a range of stupas on the west from a corresponding line of monasteries on the east. A remarkable characteristic disclosed in the mounds excavated is the sequence of monastic structures erected on the ruins of earlier ones on the same spot. Of the multiplicity of levels so far revealed, however, to none can be ascribed a date prior to the 6th century A. D.; though the legendary association of the Nalanda site with the person of the Buddha and his contemporary disciples encourages the hope of earlier finds.

"During 1922-23 further excavation was undertaken in Monastery No. 1, which was one of the first structures to be excavated on the site when operations were commenced in 1916; and definite indications of yet another stratum of occupation came to light, making in all 9 successive levels (including 2 subsidiary levels revealed in the central *chaitya* in the courtyard) on the same individual site. These levels represent a sequence of monasteries which range in date from approximately the 6th century A. D. down to the 12th.

"The indications of this further stratum were contained in the fragmentary remains of a low wall located beneath the projecting *chabutra* on the east side of the inner quadrangular court of the monastery. This *chabutra* represents the 7th level (or, alternatively, the 5th if, as has been done in previously published accounts of the excavations, the two additional subsidiary levels in the central *chaitya*, intervening between the 4th and 5th main strata of occupation, are omitted from consideration). The newly disclosed wall runs across the monastery quadrangle beneath the central *chaitya*, and has been traced as far as the projecting plinth of the structural 'caves' built against the north wall of the court, which are contemporaneous with the 4th successive stratum down. The precise purpose of this wall is not apparent; but it clearly represents a separate stratum of occupation sandwiched between the two lowest levels previously disclosed, the lower of which, as represented by the brick paving covering the

monastery courtyard, must now be considered the 9th down from the top, the newly disclosed wall representing the 8th.

"With a view to ascertaining if, beneath this 9th level, yet earlier structures were to be recovered, pits were sunk in the courtyard in two places, and again in the eastern verandah of the monastery. The pits in the courtyard were taken down approximately 14′ beneath the 9th level already disclosed, but nothing beyond virgin soil of a clayey nature was revealed. The pits excavated in the eastern verandah were carried down to the foundations of its rear wall, which were found at a depth of 12′ 6″ below the verandah paving, corresponding to the 7th level down; but the short cross walls connecting the rear wall of the verandah with the parapet wall in front only descended 5′ 9″ below the same 7th level. Beneath these cross walls was found the original virgin soil on which they were directly built.

"The front parapet wall of the same verandah, again, was found to descend to a depth of 12′ 6″ beneath the verandah paving, its foundations coinciding in level with those of the rear wall of the verandah just mentioned.

"The reason for the extreme depth of the foundations of the verandah walls is not immediately apparent; for no indications of paving or other evidence of occupation within this depth was disclosed; and one is led to the assumption that the necessity for it arose from the constructional considerations involved in the existence of the lakes and ponds in the immediate vicinity, and the relatively high level of the sub-soil water which their presence induced.

"Further excavations commenced during the year east of stupa site No. 3 revealed the existence of a small monastery, oblong in plan, set between the stupa and monastery site No. I-A. The newly exposed monastery has been designated No. I-B, and is attached to monastery No. I-A to its east. An interesting feature of the party-wall between these two monastic structures, and one which bears on their chronology, is the circumstance that the exterior S.-E. corner of the smaller monastery No. I-B has been enclosed by the extension of the contiguous western wall of monastery No. I-A, which is built around it; thereby indicating that the latter monastery is posterior in date to the former. This newly excavated monastery No. I-B conforms to the common type-plan of those already disclosed, but is on a much smaller scale. It consists of a small open court (measuring 26′ N-S and 15′ E-W) enclosed by a colonnaded verandah, of which the pillar bases on the usual low rounded parapet are still *in situ*. Behind the enclosing verandah are the small square chambers for the accommodation of the *bhikshus* in residence; while on the south side of the structure is the sanctum, and opposite to it, on the north, the main entrance. The clearance of this main entrance disclosed the existence of an earlier stratum of occupation some 7′ below the level of the verandah paving and coincident with the general level of the brick-paved area in front of the monastery externally. This earlier stratum has not yet been opened up; and the conservation of the upper structure will be necessary as a preliminary to this. A feature of interest of this upper structure is the existence of the remains of a later stair affording access from the paved area exterior to the monastery up to the higher level of the structure, the stair coinciding in position with the earlier entrance of the lower stratum of occupation. The stair rises from a layer of accumulated earth some 2′

above the exterior paved area previously mentioned; a level which therefore must be accepted as contemporaneous with the higher stratum of occupation internal to the little monastery, which stratum is an additional 5 feet above the foot of the stair. The elucidation of this circumstance must await further clearance, which it is hoped will be carried on next year; but the evidence patently points to the destruction of the original monastery and the subsequent re-occupation of the site.

"What is, however, already apparent in the general disposition and arrangement of the several monastic structures at the south end of the Nalanda site, is that they formed of themselves the southern boundary of a larger enclosure accommodating a number of monasteries. This will be apparent in the plan of the site, as excavated to date, attached to this report (Pl. XVIII), a significant factor being the relative positions of the entrance stairs of the several adjacent monasteries. The Nalanda of early mediæval times, however, unquestionably extended far beyond the limits of the site so far acquired for excavation.

"An attempt to discover the possible existence of the original boundary wall of the Nalanda monastery, referred to by Yüan Chwang,* was made immediately west of stupa site No. 3 where it adjoins a pond; but while fragmentary walls, much disturbed by subsidence, were brought to light, no evidence of any massive boundary wall, such as one would expect to enclose a town, was revealed.

"Excavation was further undertaken immediately north of monastery site No. 1 in the area now designated site No. 4 (according to General Cunningham, the monastery of the Buddha Gupta of Yüan Chwang's account†); and the four external walls of another rectangular monastery were disclosed some 8′ 6″ beneath the surface, as well as the north, east and south walls of yet another structure contiguous to it on the east. This last site (called site No. 5) has not yet been cleared sufficiently to permit of the building it contains being identified, but from present indications it would appear to have been another little monastery.

"Approximately one-half of the area of monastery No. 4 has been cleared on the north side, disclosing again the usual monastic plan of central quadrangular court and enclosing colonnaded verandah, backed in turn by the *bhikshus'* cells; the main shrine being located on the east and the entrance opposite to it centrally in the west wall. Here, again, there are the remains of a later external stair affording access to the higher later levels of the structure—an arrangement which repeats that obtaining in monastery No. 1 adjacent.

"A feature partly revealed in the clearance of the inner quadrangle of this monastery No. 4 is a low brick *chabutra* projecting into the enclosure.

"The excavation of this courtyard has been carried down to an early paving some 11′ 6″ below the level of the upper paving which, in turn, is 3′ 6″ below the level of the column bases still *in situ* around the inner verandah parapet; and it is clear that the sequence of occupation and destruction, desertion and re-habilitation revealed in the

* "Then round all was built a lofty enclosing wall with one gate" (*vide* Watters on Yüan Chwang, Volume II, page 165).

† A. S. R., Volume I—Bargaon.

case of monastery No. 1 nearby was also the lot of the newly excavated monastery No. 4. Fallen apparently from the upper verandah roof of this latter monastery, fragments of concrete with a simple semi-segmental edge forming a sort of low parapet were recovered from the upper layers of the débris. They seem to have been precipitated into the courtyard on the collapse of the verandah during the burning of the building; the presence of a large quantity of timber in the construction of which is apparent through the considerable amount of ash and charcoal strewn over the site. A feature of minor interest disclosed in the course of the excavation of this site was a drain running through the eastern wall of the monastery to carry away the surface water of the inner quadrangle. The drain is of the usual corbelled construction, and is furnished with a heavy stone *parnala* at the point of discharge in the exterior wall. A narrow passage through the thickness of a wall in the N.-W. corner of the monastery, connecting a cell with the verandah, again reveals this same corbel treatment at the head. It is one of the few instances on the site where this constructional device is preserved relatively intact.

Central Circle.
Bihar.

"In an appendix a tabulated list is given of the finds made during the course of the work. Such articles are mostly found in the cells in which the monks had their quarters, and the comparative scarcity of the finds made is due to the fact that only a small number of these cells were excavated and their interiors disclosed during the year under review. None of the minor antiquities recovered lend themselves to detailed discussion; but the existence of Puranic deities (as items Nos. 12 Brahma, and 37 Mahishasuramardini) along with representations of the Buddhist hierarchy on this essentially Buddhist site is eloquent testimony of the general catholicity and eclecticism of the people towards religious faith in later mediæval times; and the evidence is multiplied by the numerous similar finds made here in previous years. Again, Yüan Chwang's reference to the study of the Vedas by the monks resident here is equally significant.

"The gradual encroachment of Puranic Hinduism on the preserves of the Buddhism so effectively propagated by Asoka in the 3rd century B. C. can perhaps be traced back to the beginning of the Christian era when Wima Kadphises II the Kushan conqueror of India, proclaimed himself a devotee of Siva and stamped the images of that deity on his coins; and by the commencement of the 7th century the relationship of the two predominent religions is typified in the variant faiths to which the family of Harsha subscribed: his father being a worshipper of Surya; his elder brother and sister ardent Buddhists; and Harsha himself in his earlier years distributing his devotions impartially between Siva, Surya and Buddha*."

Mr. Dikshit sends me the following notes on places visited by him in the course of his tours this year, including as usual a number of iconographical notes of interest and importance.

Eastern Circle.
Bengal.

"Biharail in Rajshahi District was visited at the suggestion of the Director of the Varendra Research Society, as it was the find-place of one of the most important antiquities preserved in the Society's Museum at Rajshahi, *viz.*, a sandstone image of Buddha in the Gupta style familiar from the numerous examples at Sarnath. It is

Biharail.

**Early History of India* (Chapter XIII) by V. A. Smith, Oxford Press, 1904.

 situated about half a mile to the north of the modern village of Madaripur, on the western edge of the *bil* or marsh which forms the old bed of the Barahi river. The ruins here consist of an irregular square-shaped mound known as the *Rajbari* or palace, which rises to a height of not more than 5 or 6 feet above the surrounding level, besides several old tanks in the vicinity. It is probable that other structures close to the river bank have been washed away. From time to time discoveries of antiquities are reported from this place, the latest instance being two carved tiles with figures of Yakshas, discovered some 10 or 12 years ago and now presented to the Rajshahi Museum.

"The part examined by me this year was the western part of the Rajbari mound, where it slopes abruptly to the level of the surrounding paddy-fields. Brickbats lying scattered at places, particularly near the mouths of recently dug pits on the highest portion of the mound, show the extent to which the spoliation of the mound for its brick contents has been carried on. Sinking pits partly on unbroken ground and partly in the craters of the old pits, I found portions of a wall 4′ 7″ to 4′ 10″ in breadth running north and south and within 2 or 3 feet from the surface. This wall was traced to a length of 44 feet on the north, other walls of lesser thickness crossing it at intervals on the east, thus indicating that the exposed structure was constructed on the familiar ancient plan of a row of cells round a central courtyard. At a distance of about 32 feet from the broken north end of the main wall, another wall of the same breadth was found running to the east with a cross wall to the south, evidently forming part of a cell. The removal of bricks on a large scale from the site has resulted in breaking the continuity of the walls. Before leaving the site, the exposed walls were covered with earth. The size of the bricks used in the building is fairly large, being 14½″ in length by 10″ in breadth and 2½″ in thickness. Judging from the analogy of the bricks discovered in other ancient sites, it can be safely concluded that the structures here belong to a period not later than the Gupta age, which is further corroborated by the discovery of the antiques now preserved in the Rajshahi Museum. In view of the possibility that the mound will in future be even more subject to the brick-hunting operations of the villagers, as they now know where exactly to look for the walls, it is intended to take steps toward the protection of the mound under the Ancient Monuments Preservation Act.

Dhanora. "Dhanora is situated about a mile and half to the west of Madaripur. The remains here consist of a number of tanks (some of them of fairly large dimensions) and some mounds, two of which, the Rajbari mound and the Buruz mound, are quite conspicuous, being some 8′ to 10′ and 12′ to 15′ respectively above the level of the surrounding land. The former is situated in an open plain, with practically no vegetation growing over it. The Buruz mound is a small circular mound much less in area than the other, and overgrown with shrubs and surrounded by bamboo clumps near the cluster of huts called Dakshinapara. It is not possible to speculate about the probable age of the antiquities hidden in these ruins. The only effective, if temporary, check to the vandalizing activities of the villagers seems to be the superstitious fear which is sometimes produced by the occurrence of some mishap or sudden illness following the removal of stones or bricks. A rough stone lying at the Rajbari mound has quite recently been the subject of such a story, and it is to be hoped that the story will linger sufficiently long to prevent the recurrence of attempts to remove stones or bricks from the mounds, at least until it is found possible to extend the protection of the Act to the site.

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Bengal.

"An interesting line of study that suggested itself in connection with the investigations made in this locality was that of the ancient routes that connected old cities and sites. The remains of two ancient embanked roads, which must have been important thoroughfares in their days, were shown to me in the neighbourhood of Dhanora. One of these passing from west to east is part of the old Muhammadan road from Gaur to Dacca and Sonargaon. This road probably exists from Moghul and Pathan and even pre-Muhammadan days. An untutored peasant questioned as to its destination towards the east, replied that it led to Mahasthan. It is quite likely that an old Hindu road connecting the city of Paundravardhana (probably Mahasthana) with ancient localities in western Varendra, was further improved in Mussalman times. Between Madaripur and Nachoul a number of ancient sites on the border of the Malda and Rajshahi Districts are tapped by this road, prominent among which may be mentioned Paotal, the findspot of the black basalt door-jamb with bold serpentine ornamentation, now preserved at the Rajshahi Museum. Another old embanked road runs north from Dhanora to Rajapur, near Thakur Manda, which according to the gazetteer, contains extensive ruins. This road can be traced in the south to the village of Padishon, which has also yielded some relics to the Society. A systematic search for ancient trade routes in Varendra is likely to yield valuable material for the study of antiquities.

Berachampa.

"The existence of the ruins of a fort near Berachampa, District 24-Parganas, was brought to the notice of Government by one Tarak Nath Ghosh and other petitioners from the locality in 1906. The site was visited in 1907 by Mr. Longhurst who reported that the ruins were of little or no interest, although he mentions that he found fairly large size bricks 15″ long by 11″ broad and moulded bricks and pottery assignable to an early period. The find of six rectangular copper cast coins in the neighbourhood (which were subsequently made over to the Bangiya Sahitya Parisad Museum) further shows that this was one of the earliest settlements in lower Bengal, and it has now been brought under the provisions of the Ancient Monuments Preservation Act (Government Gazette Notification No. 1283-Mis., dated 22nd November 1920).

"The so-called fort now consists of merely two stretches of rampart walls, one, running south from near the station for about three quarters of a mile, and another meeting it at its southern end and extending to the east for about two furlongs and then ending in marshy land. The northern wall, if it ever existed, must have merged in the existing land of the village of Deuliya. There was probably no wall on the east as the ground here is marshy. The gap at the south-west corner is known locally as the *Singha Darwaza* or lion gate. Perched on the top of the southern wall, which here rises to a height of about 30 feet, is a Muhammadan brick-built tomb, reputed to be that of the *faqir* Gora Chand. There are a number of local legends concerning the relations of the *faqir* and the Raja Chandraketu. The place Berachampa is supposed to be the scene of the former's miraculous feat of making a *champa* or *champaka* flower grow out of a *bera* or bamboo fence.

"Another site more promising for excavation than the fort is a mound known as Varahamihir's house, just to the north-east of the Berachampa Railway Station. The mound has been cut by a road which passes through it and the large number of bricks

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of big dimensions lying on the roadway and on either side prove the existence of the remains of an ancient brick building here.

Barakar.

"Barakar in Burdwan District is the last station in Bengal on the Grand Chord line of the East Indian Railway, and is situated on the left bank of the river of the same name which here divides the Manbhum District of Bihar from the Burdwan District of Bengal, and whose basin is one of the oldest worked and richest coal fields of India. The group of four temples here known as the Begunia temples is picturesquely set in the vicinity of the modern collieries on the one hand and the broad sandy bed of the river on the other. The fancied resemblance of the elongated tapering spire to a brinjal fruit (Bengali: *begun*) is supposed to give the name *Begunia* to the temples, and is now in its turn transferred to the neighbouring locality. The temples were first described by Beglar in 1872-73 and subsequently by Dr. Bloch in 1902-03. Their importance as the best preserved and the only dated examples of the stone architecture of Jharkhand has been dwelt upon by both scholars. I add here an account of the epigraphs themselves, which are incised in Bengali script on the right door-jamb of the Ganesa temple. Though named after Ganesa, owing to the presence of an image of that god in a niche in the shrine, the temple has always been dedicated to Siva, as can be seen from the figures of Nandi and Bhringi at the bottom of the door-jambs and the figures of the dancing Siva in the centre of the lintel of the doorway. The first record is in 12 lines in fairly good script, but the second one is so corrupt and cursive that it was left unnoticed by Dr. Bloch. The first inscription records that on the auspicious (day) Wednesday, the eighth (day) of the bright half of the month of Phalguna in the Saka year 1382 calculated by the figures of the eyes (=2, but some times calculated as 3 in Bengal), the *vasus* (8), three (3) and the moon (1), Haripriyā, the beloved wife of the lord of the earth Harischandra, possessed of great wealth, consecrated a beautiful temple in honour of the God (Siva) according to the rites for the attainment of religious merit. The equivalent English date works out as Wednesday the 18th February 1461 A. D. and not 18th February 1462 A. D. or 4th March 1462 A. D. as suggested by Dr. Bloch. The gist of the second record is that a certain Brahman named Nanda, together with his wife, restored the temple, when the original monument of king Harischandra was out of repair. On Wednesday, the seventh of the dark (?) half of the month of Margasira in the Saka year 1468 counted by *vasus* (8), *rasas* (6), seas (4) and the moon (1). This date must fall in the year 1546 A. D. but the exact equivalent is uncertain.

"All the temples contain the emblem of Siva, although two of the temples are known after Durga and Ganesa respectively. Beglar has made far-fetched observations from the fact that the shallow incision of the *arghya* of the *linga* in the Siva temple bears some resemblance to a fish. Nowhere in Hindu iconography is the representation of a fish associated with the worship of Siva. Naga pillars with the figures of Naginis in niches are a peculiar feature of the external ornamentation of these temples.

"The Kalyanesvari temple-group is situated at a beautiful spot on the left bank of the Barakar at a distance of 4 miles to the north of the town of Barakar, and is a noted place of pilgrimage, where a number of animals are daily sacrificed to the goddess. The deity is said to have revealed herself to the Raja of Panchakut or

Panchet in Manbhum District, who built the temple for her worship. Besides five temples in the compound of the Kalyanesvari temple, there is one in the slope of the *nāla* which here joins the Barakar, and another in the outer compound. The oldest temples are not more than one or two centuries old and some of the additions are quite modern. The buildings are well looked after by the attendant priests, although the daubing of paint on the images and the white-washing of the temples obscure much of the beauty of the sculpture and architectural details. One peculiarity of the group of buildings here is that while the main temple has a squat low ordinary spire, a subsidiary temple on the opposite side of the courtyard has a high spire with an ornamental band of panels containing human figures, many of which are obscene.

"The village of Garui, about 5 miles from Asansol Junction, contains a small but interesting sandstone temple quite different in plan and design from the Barakar temple. It was visited by Dr. Bloch in 1903-04, but he did not consider it worth preservation. As pointed out by the late Mr. Manmohan Chakravarty, this temple is the only extant example of a stone hut-roof temple of the Bengali style, with a simple spire. In my opinion, therefore, it deserves to be rescued from ruin and neglect, and I intend to approach Government in the matter of its preservation as early as circumstances permit. Its condition has much deteriorated since Dr. Bloch's visit, as is evident from a comparison of the old photographs with the new. The cut-stone facing of the spire and the curved cornice have almost entirely disappeared and the south-east corner is about to collapse. Trees and shrubs have grown all over the exposed masonry and only early attention can now prevent the building from becoming a complete ruin. It consists of a sanctum measuring 12′ 6″ by 5′ 5″ divided into three bays, and a verandah with a narrow entrance chamber joining the two. The sanctum is roofed by a hemispherical dome but the two side bays have a vaulted roof. The verandah also had a similar vaulted roof, but it has fallen in and the people of the neighbourhood have carried away a large number of stones from the roof and the plinth of the building.

Garui.

"The temple stands on a plinth about 28 feet square, and must originally have presented a very pretty appearance with its curved cornice façades and pillared verandah in front. The only figures sculptured on the temple are the two images carved in recesses on either side of the entrance to the shrine, one of whom is clearly an attendant of Vishnu, as evidenced by the *āyudhas* in his hands. The presence of a *chakra* or wheel in the wall decorations further corroborates the inference that the temple must have been dedicated to Vishnu. It is believed that the images enshrined here were of gold and were carried off by the Marathas in one of their raids.

"A typical instance of the keenness and enthusiasm of the votaries of art in Bengal, a province where the revival of artistic efforts is more in evidence than in other provinces—is afforded by the collection of sculptures made at his studio by Babu Sasi Bhusan Pal, an artist of Maheshvarpasa, a village near Daulatpur in Khulna District. In his anxiety to secure constant inspiration from the works of ancient masters, he has incurred the trouble and expense of bringing together a number of old images lying about in obscure corners of the District of Dinajpur in the ancient Varendra country, which has been already more or less thoroughly exploited for sculptures

Maheshvarpasa.

Eastern Circle. Bengal. by the Varendra Research Society. Mr. Pal has had the good fortune to secure a fine black basalt image of Chandi from the vicinity of Bangalbari in the Dinajpur District. This image is 4′ 6″ in height and is in fair preservation except that three of the hands of the goddess and the head of the lion on the right are lost. The goddess holds a Siva-linga in her upper right hand—the only hand preserved—has a high matted headdress and wears all ornaments. Besides the bull and the lion, the usual *vāhanas* of Siva and Durga, which are represented on either side as looking up to the goddess, the peculiar *vāhana* of Chandi, the *godha* or lizard is depicted below in the centre. There are a number of female attendants of the goddess, besides the figure of the donor in one of the recesses of the pedestal. Three male deities occur in niches at the top of the back slab and probably represent the three principal gods, Brahma, Siva and Vishnu. The image is on the whole a fine piece of sculpture and would have been a valuable addition to any public collection.

" Another interesting image in the same collection is that of Chamunda, who is shown in her characteristic emaciated form and grim facial expression, seated over a double lotus seat on the body of a naked male figure, with her right hand touching three severed heads depicted on the pedestal. An owl is shown on the top of the back slab and a comb of flames above the head of the goddess over the snake held up by her two uppermost hands. Though considerably damaged, the image retains enough of its original excellence to show that the artist was of no mean order. Three images of Vishnu and one of Mahishasuramardini were also photographed.

Bahulara. " As described elsewhere the Siddhesvara temple at Bahulara is in hand for conservation. The temple itself occupies only a portion of the large mound which stretches from east to west. The digging operations conducted in the southern part of the mound disclosed a number of rectangular and circular brick structures, of various sizes, which would unquestionably have been called ' votive stupas ' if discovered in a Buddhist site. They are of various shapes and sizes and disposed about irregularly over the area. The number of these stupa-like structures found up to date is 19 (2 square, 1 oblong and the rest round). Four of these seem to have been partially cut away in sinking the foundations of the compound wall surrounding the Siddhesvara temple and its eight subsidiary shrines. This would point to the conclusion that the ' stupas ' belonged to an earlier stratum, possibly associated with the worship of other than Brahmanical deities, Buddhist or Jaina. The Parsvanath image now preserved in the temple indicates that the Jaina faith was in existence in this neighbourhood. The worship of stupas, though rare in later Jaina ritual, was prevalent among the followers of Jainism at Mathura in the Kushan period. Further investigation of the problems connected with the earlier occupation of the site of the Bahulara temple will be possible only with the complete exploration of the mound.

Bankura. " Two miles to the east of Bankura town is the shrine of Ektesvar on the left bank of the Dalkisore river. As noticed by Beglar (A. S. R., Volume VIII, page 200) the temple has undergone repairs and additions several times, so that except the basement mouldings and the Nandi pavillion, very little of the original structure is preserved. Bankura is one of the few places where the terracotta work has still survived to some extent, as illustrations of which the modern terracotta panels decorating the doorways leading to the shrine and the temple compound at Ektesvar may be mentioned.

"Two interesting stone images occur in the subsidiary shrines in the compound. Both of these are standing twelve-handed images with seven-hooded cobra canopies on their heads. The late Dr. Bloch found a similar image at Garui in Burdwan District, which he thought represented Vishnu lying on the serpent king Ananta, but as Vishnu is never shown as possessed of 12 arms, and some of the objects to be seen in the hands of the deity are not in keeping with the character of Vishnu, the identification is doubtful. **Eastern Circle.** **Bengal.**

"Sonamukhi, a Railway Station on the Bankura-Damodar line, contains a remarkable modern temple of Girigovardhan, to which the attention of the Archæological Superintendent was drawn by the Collector of Bankura. The well-known story of the lifting of the mountain Govardhan by Krishna to protect the cows and cowherds from the wrath of Indra is represented in sculptures of the mediæval period (*vide* page 97 of the Annual Report for 1921-22). The architectural delineation of the story is however rather rare and confined to a few modern examples. From inscriptions painted on the monument we learn that the Sonamukhi temple was built in Saka year 1757 (1835 A. D.) by Visvambhara, the son of Gadadhara-Siromani. The representation of the hill in the present instance follows broadly the same traditional lines as are familiar to us from the oldest schools of sculpture. Round boulders—here painted over the cement-plastered walls—with wild animals, serpents, peacocks and other birds and with niches serving the purpose of caves, complete the picture of a mountain. In the same courtyard as the Girigovardhan temple and facing it is a Siva temple built at the same time. This is of the single-cell type, but is interesting on account of its ribbed dome and the beautiful floral tracery in plaster on the false doorway in the south wall. *Sonamukhi.*

"Harmasra is some 16 miles to the south of Bankura town and was visited at the instance of Mr. G. S. Dutt, I.C.S., the Collector of Bankura, who reported the existence of a ruined old laterite temple here. It was found on inspection to be a very small sized temple (internally measuring 3′ 8″ square) though interesting as having a tall tower, 25′ to 30′ high, characteristic of the Orissa type of temple architecture. The temple stands on the top of a small mound, and is surrounded by thick vegetation. Some stones of the spire have already been displaced and an attempt to repair is likely to involve the dismantling and rebuilding of half the temple. It was therefore decided to leave the temple as it is. *Harmasra.*

"On the bank of the Sanbandha tank lies an image of Parsvanath, the Jaina patriarch, with the hooded cobra on his head, and two naga maidens with two male chowrie-bearers as attendants, and the eight planets four in each column on either side. This image, together with the Bahulara Parsvanatha image noticed last year, are among the few vestiges of Jainism now left in Bengal. A movement recently set on foot by some Marwari Jaina immigrants in Calcutta aims at exploring the ancient relics of their religion surviving in these parts—they are particularly numerous in the neighbouring district of Manbhum in Chota Nagpur—and reclaiming their fallen co-religionists who have all but forgotten their old faith and taken to the humble professions of weaving and fishing.

"A low jungle-covered mound standing in the midst of a bare plain at a distance of about 5 miles from Krishnagar is known locally as *Maider Boner Dhipi*, and is within *Suvarnavihara.*

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a short distance of the village of Suvarnavihara (District Nadia). The mound is oblong in shape, being about 200 feet in length from east to west and a little less in breadth with a height of 5 to 10 feet. Thick undergrowth now obscures a general view of the mound, but brick-bats and pieces of pottery can be picked up from all parts. Carved bricks with floral designs are from time to time discovered. Excavations at this site may bring to light ancient buildings of at least the Pala period, although no evidence is yet forthcoming to confirm the Buddhist character of the ruins which the name of the neighbouring village (' Golden Vihara ') would indicate.

Bamunpukur.

" The Ballaldhibi mound at Bamunpukur is the only relic of antiquity now left at or near Nadia or *Navadvipa*. It lies between the Bhagirathi and the Jalangi rivers, not far from an old bed of the former. On the west and south the mound rises abruptly to a height of 20 to 25 feet above the level of the fields, but towards the north and east it is not so prominently marked, owing to the presence of large trees and to gradual slopes. The top of the mound was excavated years ago and the stone walls of a temple together with some architectural pieces were discovered. None of these are now to be seen on the spot except one stone near the Kazi's tomb in the village. The mound is now protected under the Act, and it is hoped that unauthorized excavations will no longer be carried on as hitherto.

Dacca.

" The mosque and tomb of Haji Khwaja Shahbaz are situated west of the old Government House at Dacca, and south of the Ramna Kalibari. The Haji, who is said to have been a rich merchant at the time of Aurangzeb, built the mosque and the tomb for himself in 1089 A. H. (1679 A. D.) during the viceroyalty of Prince Muhammad Azam. The mosque is a pretty building, measuring 68 feet by 26 feet on the outside and surmounted by three massive domes. Stone is used in the solitary band of the low basement, in the pointed arch frames of the door openings and in the pulpit. Besides the battlement and the rows of windows in the front wall, and a little similar decoration in what may be called the Shaista Khani style, the wall surface of the building is quite plain and unornamented. The tomb which lies to the east of the masjid is a fine building, 26 feet square, surmounted by one dome. It has four minarets at the corners, which add to its beauty. Both buildings are worthy of preservation.

Jafarabad.

" Dara Begum's tomb in Jafarabad is situated on the way to the Satgumbaz mosque, about three miles from the railway station. The identity of the person whose remains are buried here is not yet established, though on stylistic grounds the building must have been constructed sometime before Shaista Khan's rule at Dacca. It must once have been a handsome building but is now much ruined and overgrown with thick jungle. In plan, it consists of an inner apartment 27′ 5″ square which contains the graves, with a deep verandah on the south (13′ 8″ in breadth) from which the tomb is usually approached. The dome surmounting the tomb is reputed to be larger than any other dome in Dacca, and is still intact. The walls of the tomb are 7′ to 7′ 3″ in thickness and are pierced with arched openings on all sides except the west. The verandah has three arched openings on the south and one each on the east and west. The monument is still in a fair condition on the whole, and had not the owner refused to make over the tomb and attached land, proposals would have been made for its protection.

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Mirpur.

"The Darga of Hazrat Shah Ali of Baghdad at Mirpur, 8 miles to the north-west of Dacca, is a shrine held in great sanctity and reverence by the Mahomedans of East Bengal. The tomb stands on a slight eminence, and is a square building surmounted by a dome. Modern repairs to the tomb and the addition of several out-houses and paved enclosures have left little of real archæological interest except the inscription fixed in a recess in the doorway of the shrine. The inscription records the building of a mosque in the year 885 A. H. (1480 A. D.) but the names of the person who built it and of the reigning sovereign are missing. The Darga is kept in good order and judging from the constant stream of pilgrims, the *Khadims* must be receiving an income sufficient for the maintenance of the monument.

Bajrajogini.

"The large and prosperous village of Bajrajogini in the Munshiganj sub-division is about 3 miles from Rampal, the seat of an ancient capital of the Senas. A number of Hindu and Buddhist sculptures have been discovered in this neighbourhood, some of which have found place in the Dacca Museum. In the front wall of a modern temple in the bazar four beautiful black-stone images have been fixed, three of which represent the fish, boar and man-lion incarnations of Vishnu, while the fourth is the Buddhist goddess Parnasabari. The latter is one of the few representations of this goddess ever found in India. The Sadhana of the deity has been faithfully followed in the delineation of the image. The goddess is represented as three-headed, and with an angry smile (*sakrodha-hāsit-ānanā*) which has been skilfully brought out by the sculptor. The apron of leaves seen at the waist is the most important characteristic of the goddess. Being conceived in Buddhist iconography as the destroyer of diseases, the goddess is here shown as trampling under her feet the personifications of small-pox, distinguished by the small round pox marks on their bodies. The other figures flying away from the goddess on either side are also other personified epidemics. The defeat of the Hindu gods at the hands of the Buddhist deities, which is a common feature in later Mahayana images, is exemplified in the present instance by the prostrate figure of Ganesa below the lotus seat of the goddess.

"The *Matsyāvatāra* or fish-incarnation is another rather uncommon subject in Bengal sculpture. The lower part of the image is in the form of a fish and the upper human, the subdividing line between the two being the *vanamāla*. The usual attributes of a Vishnu image, as well as the accompanying figures of Lakshmi and Sarasvati on either flank and Garuda on the pedestal, are present. The expression of the face is particularly happy and the sculpture ranks high among the products of the East Bengal school of sculpture. There is nothing noteworthy about the Varaha and Nrisimha images, except that in the latter, in addition to the disembowelling of Hiranyakasipu, the scene of the emerging of the deity from the pillar is depicted, as in several other instances.

Sukhavaspur.

"In a suburb of Bajrajogini known as Sukhavaspur two images of the Buddhist god of wealth, Jambhala, discovered in a neighbouring tank are worshipped in a modern Kali temple. One of these is made of polished black marble and the other of purple grey stone. They conform to the usual description of the deity, each having a protuberent abdomen and holding a mungoose in the hand."

Paharpur.

The munificent support given to archæological research in Bengal by Kumar Saratkumar Roy of Dighapatiya and the excellent work done by the Varendra Research Society

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of which the Kumar Sahib is the founder and liberal patron have been mentioned in these Reports on many previous occasions. This year it is a pleasure to record that a plan of co-operation between the Kumar Sahib and the Archæological Department has rendered possible the preliminary examination of the promising site known as Paharpur by a party of students from Calcutta University under the direction of Dr. D. R. Bhandarkar, formerly Superintendent of the Archæological Survey in the Western Circle, and now Professor of Ancient Indian History and Culture at Calcutta University. The following account of the measures carried out by this party in 1922-23 was, I understand, drawn up by Messrs. Jitendra Nath Banerjee and Hemchandra Roy, two of its members under the guidance of Dr. Bhandarkar, and has been received from the latter for inclusion in this Report.

" About 3 miles west of Jamalganj, a station of the Eastern Bengal Railway, lies a tiny village named Paharpur which contains some ruins. These ancient remains cover approximately an area of 81 bighas of land, and consist of many mounds enclosed by a continuous line of walling the central one of which is so big that it is locally known as *Pāhād* (hill) (Pl. XXV). This interesting site had long since attracted the attention of many eminent European officers and travellers. It was thus visited and described by Dr. Buchanan Hamilton,* as early as between 1807-11, by Westmacott† in 1875 and by Sir Alexander Cunningham‡ in 1879-80. The last named officer wanted to excavate it himself, but was unable to carry out his object in consequence of what he calls the 'dog in the manger policy' of the local zemindar.

" There is a widespread belief all over the neighbouring villages that a great treasure lies buried in the mound, and it is, therefore, no wonder that clandestine attempts were made from time to time by various persons to find this treasure. Two such attempts, one by a man named Ghanashyam as early as 1876 and the other some time later by a Bairagi, may be mentioned here. In more recent years the treasure hunters have been replaced by brickdiggers who are, however, the worse of the two classes of vandals. Now one such person who lived in Paharpur, Somir Sonar by name, while he was digging for bricks in a spot near the S.-W. corner of the enclosure, accidently lighted upon a portion of an octagonal stone pillar which was inscribed. The characters of the inscription are of the Proto-Bengali type of the 11th or 12th century. The record says: 'This excellent pillar was caused to be made by *Sri Dasabala-garbha* to please the three Jewels (*Dharma*, *Buddha* and *Samgha*) for the good of all created beings.' This discovery proved that the site was a Buddhist one, a view which was at first propounded by Buchanan Hamilton and later upheld by Westmacott, both taking the main mound to be the remains of a big Buddhist stupa. Interest having been created by this discovery, archæological attention was centred on this site which was thought to be worthy of scientific excavation. The object, however, remained far from fulfilment until Kumar Saratkumar Roy of Dighapatiya came forward with a promise of Rs. 2.500 every year for a period of 5 years on condition that the Calcutta University staff under Professor D. R. Bhandarkar should undertake the work. This met with the characteristic sympathy and approval of Sir John Marshall, Director General of Archæology,

* Buchanan, "Eastern India," Volume II, page 669.

† Westmacott, " On Traces of Buddhism in Dinajpur and Bagura ", J. A. S. B., Volume XLIV, 1875, page 187 ff.

‡ A. S. R., Volume XV, 1879-80, pages 117-18.

who very generously supplemented the Kumar Bahadur's gift for the first year at least, with a sum of Rs. 2,000. Work was started on the 3rd of March 1923, and came to a close on the same day of the next month. Eastern Circle. Bengal.

" The south-west corner of the enclosure was selected for this year's excavation, as, not far from it, was found the inscription referred to above. Lines of two trial trenches were laid from here, one inside and the other outside the enclosure. On the very first day we lighted upon the outer face of the western rampart. Once it was exposed, the course open to us was to trace it as far as possible towards the south-west corner. This was however no easy task. For the preserved portion of the wall was no less than 10 feet in height, and extended towards the south over 76 feet. When the corner was reached, we began to extricate the south rampart from the débris and laid bare nearly 83 feet of it. To find out what the original condition of the site was in front of the south rampart we sunk a few trenches which revealed no less than three wallings running parallel to it and at a short interval from one another. Near the S.-W. corner, these again were met by a cross wall which ran from north to south.

" The ramparts and these wallings have an interesting history to tell. In the first place the ramparts, especially the western one (Pl. XXVI, fig. *a*) clearly tells us what addition was made to it at two different but early periods how the damaged portion was repaired and how the unequal settlement and the bulging-out of the wall were counteracted by the erection of a buttress. The cause of both these contingencies must have been floods. We tried our best to find out the original ground level of the rampart, but could do nothing as water began to ooze out before we could reach its base. It is also noteworthy that even so the lowest layer in front of the rampart consisted of alluvial soil. How could this alluvial soil come in when the original ground level of the rampart was not reached ? The reply most probably is floods. On enquiry we found that a river originally flowed close by, and not far from the south rampart we found clear traces of a river bed. This agrees with the local tradition that the site was once visited with floods. It is these that seem to have wrought havoc on the ramparts and caused not only damage to their outer face, especially that of the western rampart, but also bulging at places. In the first case the damaged masonry was renewed and the new repair-patch was given a hold on the old unbroken masonry by means of a brick plug inserted into both. By means of this bonding the thin repair-patch was made fast to the original solid masonry. This was indeed an ingenious device. In another place the rampart had settled unequally, and there was also a bulging out. This tendency of the rampart to lean forward was arrested by means of a buttress wall that was put up against it. This must have happened at a much later period. The ground level of this period is indicated by that of the buttress, and this latter is nearly six feet higher than the original ground of the rampart. This means that in course of time, as is the case with every human habitation, earth or débris accumulated and led to the rise of the ground by nearly six feet when this unequal settlement occurred in the rampart and had to be checked by means of this buttress. The buttress probably does not come up to the modern standard of efficiency. It is a straight vertical wall with a practically flat top without any kind of slope anywhere as would be required by the canons of modern engineering. Nevertheless, this much is quite clear, that in ancient Bengal they had a definite conception of the utility of a buttress wall, and this is of interest because the idea is still prevalent that buttressing

was unknown to India before the Muhammadan period.* As regards the south rampart the most curious and also the most puzzling feature lay in the erection of three walls parallel to it and the fourth cross wall referred to above. The full significance of this net-work of wallings it is impossible to determine at the present stage. The walls look however like protective works, but whether they were intended to serve as protection against the floods or against enemy attacks or both is a question that cannot be answered until we extend our excavations both eastward and southward. An interesting fact to be noticed in this connection is that there are definite indications showing that a time came when they fell into disrepair and perhaps even silted up. Then came a period of renovation when extensive fillings were effected which raised the height of the original ground, burying these wallings beneath. The significance of this will be clear when we come to consider our work inside the enclosure.

"Here we lighted upon two floors of different levels, the higher being that of a terrace running all along the inner face of the rampart. In these excavations also we unearthed structures of three different periods. Belonging to the intermediate period, so far as the excavated area is concerned, we found an oblong plinth of what was probably once a shrine. Near its S.-W. corner the discovery of two small brick stupas one of which is in a fairly well-preserved state, fully corroborated the testimony of the inscription as regards the site being a Buddhist one. At the back of the shrine-plinth were found traces of a fairly big hall measuring approximately 26 × 25 feet. Not far from the S.-W. corner of it were exhumed two ringwells the top of one of which was strengthened by a brick platform (Pl. XXVI, fig. *b*). Close by this well was found a *Chādi* or big earthern jar containing decomposed grain. Near the west wall of the hall also were picked up many loose fragments of pottery. All these indications prove that this was used as a dining hall. The only other structure of this period was a wall which ran east to west, and was situated at a short distance from and on the south of the ringwells. This wall, of which a length of 57′ 6″ was laid bare this season, was met at its west end by another which after running east to west over a short length suddenly turned to the north. This latter wall is decidedly earlier, as its original level is lower. We have not yet gone sufficiently deep to find out which structures were synchronous with this earlier wall. Suffice it to say that we have formed a stratum which is of a period earlier than the one just described. How long this intermediate period lasted, it is now impossible to tell, but certain it is that the site was at its close abandoned and became desolate. A time came when it was renovated, and here too, the desolate area together with its crumpled structures was filled up with débris and pottery fragments well rammed down. This led to the rise of the level coincident with the terrace touching the inside of the rampart.

"As regards this terrace, it seems to have been divided into three compartments: the outer approach, the intermediate corridor and the back line of cells. The floor of both the corridor and the cells consisted of hard rammed concrete, but in the case of the former the concrete floor seems to have been decorated with large brick tiles well laid.

*Cf. Mr. Hargreaves' remarks on the pilasters or buttresses at Kot Sir Kap, page 97 *ante*. Rai Bahadur Daya Ram Sahni cites as another clear instance of pre-Muhammadan buttressing, the buttress added in the 6th or 7th century A. D., on the north side of Jagat Singh's stupa at Sarnath (*vide* Sir John Marshall's Annual Report, Part II, for 1907-08, page 65, paragraph 2, and Plate XVIII, fig. *b*, addition No. IV). For buttresses at Mirpur-Khas of Mr. Cousens, D. G. A.'s Ann., 1909-10, p. 82. [*Ed.*]

To what purpose the cells were devoted is not yet quite clear ; they might have served as residences of monks. But there were two cells, one on the west side and the other on the south, which were certainly used as shrines, as the brick pedestals inside them for the installation of images were found in a very well preserved state. Huge walls going very deep down, were discovered on both sides of the upper floor. Here, too, layers of different periods were unearthed ; but as the season was fast advancing, we could not proceed further with our work in this direction. '

Bengal.

" As regards minor antiquities, our excavations were by no means unsuccessful. We found many specimens of old pottery of different patterns, though very few are whole and entire. A few terracottas of dancing and other figures, and a fairly large number of fragments of string courses of arabesque, lotus petal and other designs were picked up and are extremely interesting (Pl. XXVI, fig. *d*).

" The fillings extensively carried out with débris and pottery fragments both outside and inside the enclosure, probably at one and the same period, indicate that the place was renovated sometime after it had been abandoned and had fallen into disrepair. This work of renovation was probably done by Mahipala, the Pala king, who is said to have renovated Buddhist sites outside Bengal. The Paharpur site itself is locally associated with his name. Thus to the people of the surrounding villages the place is known as that of Mahidalan. They still point to a locality where, as the tradition says, existed a bathing ghat where Sandhyavati, the daughter of Mahidalan used to bathe every day. The legend further tells us how the product of Sandhyavati's immaculate conception was her child Satyapir* whom Mahidalan refused to acknowledge as a legitimate son, and how Mahidalan's palace was affected by a visitation of floods through the miracle-working powers of Satyapir, who grew up to be a great saint. To test whether there was any bathing ghat, a trench was cut some distance from the south-east corner of the mound and the whole of the bathing ghat consisting of concrete and brick-on-edge pavements and huge limestone slabs was extricated from the débris (Pl. XXV, figs. *c* and *d*)."

Assam.

Parbatiya.

In regard to his work in Assam, Mr. K. N. Dikshit reports: " A little over a mile to the north-west of Tezpur in Darrang District is the village of Parbatiya where a number of old temple sites known as *dols* are still to be seen. A brick-strewn mound in the Lenga Suburi quarter of the village rising to a height of about 15 feet above the surrounding level was recently dug into at the top by the villagers at the instance of a Sadhu. In the course of this digging, the foundations of an ancient Vishnu shrine and a stone door-frame were discovered. The latter is now erected at this spot. The shrine cell measures 9 feet square and was built of bricks of various sizes, the largest size being 15″ long by 13″ broad by 2″. The bottom course of the walls and the floor were laid in stone. The door-frame is in sandstone 6′ 3″ in height and one of the best specimens of stone carving found in Assam. The centre of the lintel is occupied by a flying Garuda holding in either hand the tail of a Naga a pair of whom appear in an attitude of obeisance at the bottom of the jamb one on either side, and whose bodies are shown round the edge of the door-frame. Door-frames with similar motifs are known from several examples in North Bengal, *e.g.*, one at the Rajshahi Museum

* A tolerably big mound, some distance towards the east of the main mound is still pointed out as "Satyapirer Bhita".

Eastern Circle. Assam. originally from Raotal, another at Dinajpur brought from Bangarh, and a third belonging to the temple that originally stood at the site of, and supplied materials for, the Adina mosque at Pandua in the Malda District. One of the panels of the door-jambs shows the figure of Ganesa, and several figures of Gandharvas and Kinnaras are to be seen on the lintel. The floral patterns of the bands and the pair of geese on either side are well executed. The two standing female figures at the bottom of the jambs must be Ganga and Yamuna. The villagers have erected a shed over the old cell and offer worship to the door-frame.

Barahmatra Satra. "Barahmatra Satra is another locality to the north of the above containing a number of *dol* mounds, most of which have been dug into for bricks and stones by the inhabitants of the neighbourhood. Stone images of Vishnu, Bhairava, Hara-gauri and other gods as well as architectural stones are preserved in the Satra."

Southern Circle. Madras Presidency. *San Thomé.* Mr. Hirananda Shastri officiated as Superintendent of Archæology in the Southern Circle during 1922-23 as Mr. Longhurst was on leave, but the latter returned to duty before the preparation of this Report was taken in hand, and it is to him that I am indebted for the following notes. Mr. Longhurst writes: "In 1921 Father Hosten of St. Joseph's College, Darjeeling, showed me an interesting little collection of crudely carved Christian sculptures and architectural remains which had been found scattered about the site of the present Roman Catholic Cathedral at San Thomé in Madras and had been moved to the Bishop's house many years ago, for safe custody. These antiquities consist of a number of ornamental stone crosses of various patterns, a few crude sculptures, inscriptions, several big pillars, and a large stone door-lintel, at each end of which is a carved medallion, one containing the representation of a king's head wearing a crown of European appearance, and the other the head of a Greek-like person wearing a band or fillet. The sculptural and architectural remains have a semi-classical character about them, indicating that they were probably executed by Indian masons under European supervision and originally belonged to an earlier Roman Catholic Church at San Thomé. As Father Hosten is understood to be preparing an illustrated monograph on these antiquities it is unnecessary for me to describe them in detail here. In order to assist him with the work I supplied him with a number of photographs and estampages of the inscriptions for reproduction, and in February 1923, while I was on leave, Father Hosten persuaded the Department to conduct trial excavations in the Cathedral compound at a cost of Rs. 424-14-6. They proved somewhat disappointing, but as Father Hosten is himself publishing a full account on his investigations, they need not be discussed further at this place.

"Mr. Hirananda Shastri visited all the most important sites where special repairs are in progress, namely Vijayanagar, Gingee, Seven Pagodas, and Anjengo Fort. He also visited the rock-cut temples at Undavalli and Bezwada, the Buddhist remains at Bhattiprolu and Anakapalle, and the Jain monuments at Kuppalanatham and Tiruparankunram near Madura, and at Karkul and Mudabidri in the South Kanara District. In addition to the above visits he carried out a number of ordinary inspection tours in order to see that the usual annual repairs to certain important monuments were being properly carried out by the Public Works Department, and in all cases found the work so satisfactory that there was nothing for him to report upon."

Mr. Longhurst has already made mention of the exploratory work carried out by the Southern Circle office at the request and under the guidance of Father Hosten, S. J., at and round the Roman Catholic Cathedral at San Thomé, Mylapore, Madras. The work was funded by the Archæological Department with the consent of Sir John Marshall on the understanding that the actual digging would be carried out by the Officiating Superintendent in the Southern Circle under the guidance of Father Hosten. It happened, however, that at the only time when Father Hosten could visit Mylapore, Pandit Hirananda Sastri was on leave, so that the actual conduct of the digging devolved upon Mr. I. J. Kanaka of the Southern Circle office. The work, which was of very limited duration, was reported on by Father Hosten in a note too long for inclusion in the present report, but which it is understood will be published by the Reverend Father elsewhere.

Southern Circle. Madras Presidency. *Mylapore.*

No excavation work was undertaken this year by the Superintendent in Burma, but during M. Duroiselle's absence on leave, Maung Mya, Officer-in-charge, visited Tagaung, in the upper valley of the Irrawaddy, with a view to selecting sites for excavation in the near future. M. Duroiselle says: " The country in the neighbourhood, with Tagaung as capital, is reported to have been the site where the first kingdom in Burma was established by a fugitive Prince from Northern India some centuries before the Christian era. It is said that beginning with Abhiraja, the first king, there reigned fifty kings, and with Thado Maharaja, the last, the earlier kingdom at Tagaung came to an end, the seat of government being then shifted to Prome or Srikshetra. As it is, the whole history is enshrouded in myths and fables, and it is expected that excavations there may throw some light on the ancient history of this part of the country.

Burma Circle. *Tagaung.*

" The ruins consist of old city walls and moats and of mounds marking the sites of old pagodas and it is generally believed that these ruins and the discovery of some terracotta votive tablets bearing legends in characters alleged to belong to a script of the 2nd century A. D., lend support to the statement made in the native chronicles regarding the comparative antiquity of Tagaung.* During his visit, Maung Mya examined the sites of three ruined pagodas, which, according to their tradition, were built within the first few centuries of the establishment of the kingdom there. So far the result is disappointing. There have not been found any traces to show that these mounds belong to an age earlier than the 11th century A. D. Of course, the examination was necessarily only of a superficial nature, and an excavation round those sites may prove to be of some interest.

" Tagaung is redolent with a tradition regarding the doings of a Naga or serpent, which, in fact, has now been deified, and is worshipped as one of the most powerful *nats* or spirits in the whole country. He enjoys the name of Bo-daw-gyi, and his image is enshrined in a shed near the south end of the present town. The present image, which is carved out of a thick teak post, does not appear to be old, but is said to be an exact copy of the previous and ancient one, which has fallen to pieces and may be seen lying about. The figure has only a head and neck, and the whole object, with a triple crown on it, is planted in the ground, and projects through the flooring of the shrine. It is placed in a small room in the centre of the building, closed up on all sides, and with only a door on the west. The head is without a mouth, and its grotesque shape with goggle eyes forms a sufficiently startling object. (Pl. XXXIII, fig. *b*).

* These votive tablets are unknown in Mons. Duroiselle's office and the most diligent search has failed to procure any.

Burma Circle.

Tagaung.

" It is impossible to get a true account of who this *Nat* is from the local people, as they are much too afraid of him to tell the true story. It seems that, in reality, he is a Naga or dragon, who used to pay nocturnal visits to a queen of Tagaung and put to death all those that were betrothed to her and ascended the throne. The queen eventually gave birth to two blind sons, who were to have been killed, but she saved them, and sent them away, and they founded Prome or Srikshetra. A being endowed with supernatural powers, in order to punish the Naga for his treacherous conduct, transported himself to Tagaung and killed the Naga, whose influence is still felt in the neighbourhood. His proper residence is in Tagaung hill, some way inland, where he has a palace, but he also lives in Tagaung. As Nagas do not eat in the usual manner he has no mouth, which accounts for its omission from the figure. There is a *Nat-kadaw* or medium in the town, who looks after him, and he has a yearly festival. His tail comes up in the jungle from the ground some way from the shed, but no one will admit it as that would show that he is a dragon. The people are in greater fear of Bodawgyi than of anything else, and it is said that they go to him first before going to the pagoda on any imporant occasion.

" *Hmannan* or the Glass Palace Chronicle, makes no mention whatever of the above, but simply states that the later kings of Tagaung did not live long. They were destroyed by Nagas and rakshasas which were then laying waste the country around Tagaung, which statement probably refers to troubles with inimical tribes in the neighbourhood. However, there can be no doubt that the above is a remnant of the serpent or Naga worship which was prevalent in Burma before the advent of Buddhism. That the king and people favoured Naga worship at one time is clearly stated in *Hmannan*, but this refers to a later period and is placed at the time of Taung-tuh-gyi or ' Cultivator king ' of Pagan in the 10th century A. D.

Arakan.

" The Officer-in-charge also visited the site of the old Mahamuni temple in Arakan, which is reputed to have been built in the 5th century B. C., over an image of Buddha said to have been cast by King Chanda-Suriya in the life-time of the Buddha himself during one of his sojourns in the East. The image itself, which is in bronze, is now at Mandalay ; it was brought over from Arakan in 1784 by King Bodawpaya (1781-1819). There are, on the old site, remains of a tank, stone walls, terraces, and a platform over which there now stands a very modern building consisting of a square structure with brick walls surmounted by a wooden *pyatthat*. A new bronze image, which is a copy of the one at Mandalay, has been set up in it. There are also a few stone sculptures that may be seen still standing along the terraces. One of them represents a Naga king with the hoods of a cobra over its head, and the other adeva, as guardian spirits of the temple. The Arakanese and Burmese chroniclers ascribe them to the 5th century B. C., and say that they belong to the original temple ; this hoary antiquity may be dismissed without further notice. In the absence, however, of any writing on them, it is difficult to decide their real age with any degree of certainty. The image at Mandalay will not help us much in the matter either. It has been thickly coated with gold over the body, and has been much disfigured and transformed by the addition of a crown and other ornaments : but from the general technique it certainly does not

appear to go back further than seven or eight centuries. The stone sculptures, however, from their style and technique, and from the evidence afforded by the discoveries of other antiquarian objects in their neighbourhood, cannot be anterior to the Gupta period (350-650 A. D.), and are probably to be placed some centuries later. **Burma Circle.** *Arakan.*

" One of the most important discoveries made in Burma this year is that of a stone figure of Surya on a hill at Mrohaung in the Akyab District (Pl. XXXIII, fig. *c*). The stone, which measures 5′ 3″ in height including the tenon beneath, depicts on the obverse face Surya riding in a chariot drawn by seven horses. It is much defaced but enough remains to show that it wears a high headdress, and that it has only two hands both lifted up to the level of the shoulders with something indistinguishable held in them. The figure of the chariot driver is missing. It is flanked on either side by a small female figure; one appears to be holding a bow and the other an arrow. The reverse face is filled with an inscription in North Indian characters, which also has much weathered and is practically illegible. But from what remains of it, it can be made out that it is written in a variety of Gupta characters belonging to about the 8th century A. D., and may be earlier. It is the only figure of its kind and the earliest one that has been found either in Arakan or in Burma proper. Besides, with the stone sculptures of Hindu gods on the Wuntitaung, a hillock in the neighbourhood of the above hill, it affords irrefutable evidence of strong Hindu influence in early times in Arakan and of an early Indian settlement at Mrohaung or in its vicinity. The first mention of Mrohaung in the Arakanese chronicles refers to the 10th century A. D., and shews it as the seat of an Arakanese kingdom, but the place itself either as a small settlement or a small town must have been in existence long before that period. *Mrohaung.*

" The next in importance to the above is an exquisite piece of carving on a small stone slab, measuring $8\frac{1}{2}'' \times 6\frac{1}{2}''$. It represents the eight principal scenes in the life of the Buddha (Pl. XXXIII, fig. *d*). It was discovered by one Maung Shwe Mya of Anaukywa village, Nyaung-u, in a field near the Shwezigon Pagoda, Pagan. The central figure representing Buddha seated on a throne in the *bhūmisparsa mudrā* wears a crown, and the other scenes around it are, (1) the Nativity, (2) Buddha's first sermon, (3) the taming of the wild elephant Nalagiri, (4) the descent from the Tushita heaven, (5) the miracle at Sravasti, (6) the presentation of honey by a monkey and (7) the Nirvana scene. There is no doubt from all the details of the technique, that it is of Indian workmanship, but, with the exception of a fragment found at Sarnath by Mr. Oertel* no other slab similar to it seems to have yet been discovered in any part of India. However, from a similarity between the arrangement of the figures and their general treatment, the big stone slab, measuring 15 feet in height by $9\frac{1}{2}$ in breadth, which is said to have been found at Baragaon, the old Nalanda, and shown as fig. 226 in Burgess's *The Ancient Monuments, Temples and Sculptures of India*, Part II, there can be no doubt that the latter is a prototype of the former. *Pagan.*

" Another find which is of importance for the history of art in Burma is the discovery of a rare piece of wood-carving on a wooden doorway on the platform of the Shwezigon pagoda, Pagan. The door with the carvings on it belongs to about the 11th-12th century, and is among the earliest now extant at Pagan or, for the matter of that, in Burma."

* Fig. 8, p. 84 of the Archæological Survey of India Annual Report, 1904-05.

Indian States.
Rajputana.
Jhalawar State.

In the course of his tour in the Indian States of Rajputana and Central India Maulvi Zafar Hasan. the Assistant Superintendent attached to the Director General's office, discovered 26 Persian inscriptions (16 in Alwar State and 10 in Dholpur) which he copied. Most of these inscriptions are new and have not been noticed previously. Among the monuments inspected by him, the old Buddhist caves at Binaika and Kholvi in Jhalawar State and the tomb of Zarrina in Dholpur deserve special notice.

"Binaika," Maulvi Zafar Hasan writes, " is a small village in the Alwar Tahsil of Jhalawar. It is reached by an unmetalled road from the Pachpahar or Chaumahla a railway station on the Delhi-Bombay line of the Bombay, Baroda and Central India Railway, the distance from Pachpahar being some 30 miles, while from Chaumahla *viâ* Gandhar and Dug 32 miles. To the east of the village stands a small hill containing a group of old Buddhist caves excavated on its south face. These caves including a temple are eleven in number, and are of different dimensions, generally consisting of double compartments one behind the other. One of them is particularly spacious containing pillars and side chambers, and it seems that this was used as an Assembly hall. These caves seem to have escaped the notice of General Cunningham, who visited the Kholvi caves lying not more than four miles from Binaika. The Kholvi caves are more numerous and better executed. and for an account of them reference may be made to Cunningham's *Archæological Survey Report*, Volume II, pages 280-288.

Dholpur State.

" The tomb of Zarrina stands immediately to the south of the old town of Dholpur. It is constructed of red sandstone and consists of a hall divided into nine compartments by stone pillars which support the roof. The four walls are pierced with *jali* screens and the roof is crowned in the centre by a domed *chattri*. At the foot of the grave is an inscription bearing the name of the deceased and the date 14th of Shaban 922 A. H. (1516 A. D.). Nothing is locally known about the lady Zarrina. General Cunningham identifies her with the mother of Sikandar Lodi (*vide* his Report. Volume XX. pages 113-114), but his opinion is not authenticated by any historical record. The name of Sikandar Lodi's mother was Zainab, which is a very common Muhammadan name, while the inscription on the grave clearly gives the name of the deceased as Zarrina, leaving no doubt of any other reading. Cunningham has also made a mistake in the reading of the date which he gives as 944 A. H."

Mayurbhanj.

At the request of the Maharaja Purna Chandra Bhanja Dev of Mayurbhanj that arrangements should be made for the exploration of sites of Archæological interest in his State. Sir John Marshall deputed Mr. Ramaprasad Chanda to visit the ancient sites of Mayurbhanj and submit a report on the prospects of Archæological exploration there. Mr. Chanda's report is as follows :—

" I proceeded to Mayurbhanj in the middle of November and visited some of the more important sites in the course of a week's tour. As the photographer of the Archæological Section was then ill, Mr. Percy Brown, Principal of the Government School of Art and Officer-in-charge of the Art Section of the Indian Museum, rendered timely assistance by kindly lending the services of his photographer, Munshi Sher Muhammad. During my short tour in the State the Mayurbhanj Darbar very courteously afforded all possible facilities for the work and deputed two officers, Mr. Kamakhya Prasad Bose,

Indian States.
Mayurbhanj.

a keen student of Mayurbhanj Archæology, and Pandit Tarakesvar Ganguly to act as my guides. Besides Baripada, the capital of the State, we visited Haripur, Māntri, Barsai and Khiching.

" Mayurbhanj is the largest in area (4,243 square miles) and the most populous of the twenty-four Garhjat States of Orissa. It is the northernmost of the States and is partly bounded on the east and the north by the Midnapur District in Bengal. The Chief of Mayurbhanj owns a big zemindary in Parganah Nayabasān, in the Midnapur District. The proximity of the State to Bengal explains the strong influence exercised by the styles of architecture that prevailed in Bengal in succession over the architecture of Mayurbhanj. The ruling family which bears the title of *Bhanja* and has the peacock for its emblem is probably one of the oldest now surviving in India. The official history of the origin of the family is thus summed up in the Gazetteer of the Feudatory States of Orissa :—

" ' According to tradition the Mayurbhanj State was founded some 1,300 years ago by one Jai Singh, who was a relative of the Raja of Jaipur in Rajputana.'*

" The present town of Jaipur in Rajputana was founded by Raja Sawai Jay Singh II who ruled from A. D. 1693 to 1743. So the Raja of Jaipur mentioned here must be taken in the sense of the Rajput clan (*Kachhawa* or *Kachchhapaghāta*) to which the present ruling family of Jaipur belongs. A different tradition was given currency in the earlier part of the 19th century in connection with the origin of the ruling houses of two of the Southern States, Baud and Daspalla, and of the now extinct Gumsar State who claim kinship with the chief of Mayurbhanj. In James Prinsep's paper on the *Inscription on a copper-plate grant from Gumsar* published in the *Journal of the Asiatic Society of Bengal* (Vol. VI, 1837, pp. 665-671), in a note by Lieutenant Kittoe it is said that ' The *Bhanja* Rajas are branches of the *Moharbanji* family who again claim descent from the royal house of *Chitor*. They are of the *Suryabansi* tribe of Rajputs.' Such traditions cannot be accepted as genuine unless corroborated by independent contemporary evidence. The copper-plate grants dating at the latest from the 11th and 12th centuries A. D. discovered in Mayurbhanj, Baud, Daspalla and Gumsar bear witness to the existence of two different dynasties with the peculiar title *Bhanja*, one in the north at Khijjinga, and the other in the south in the Khinjali or Ubhaya-Khinjali *Mandala* of which Vanjulvaka was the capital.† In the grants of the Bhanjas of Khijjinga it is said that the founder of the family, Bīrabhadra called Ādibhanja, ' the first Bhanja ', came out of the egg of a peahen by breaking it and was brought up by Rishi Vasishtha, *Khijjinga* being the modern Khiching, the ancient capital of Mayurbhanj. The miraculously born Bīrabhadra of course became attached to the Brahmanic Gotra of his foster-father Vasishtha. The ruling family of Mayurbhanj and the allied families of Keonjhar and Kanika are attached to the Brahmanic Gotra of Vasishtha. In the grants of the southern Bhanjas of Khinjali the family is simply styled *andajah* ' egg-born ', and nothing is said of the peahen or Vasishtha.

* L. E. B. Cobden-Ramsay, *Bengal Gazetteers. Feudatory State of Orissa*, Calcutta, 1910, p. 239.

† For the grants of the Bhanjas of Khijjinga see *Journal of the Asiatic Society of Bengal*, Vol. XL, Part I, pp. 161-169 ; *Journal of the Bihar and Orissa Research Society*, Vol. IV, 1918, pp. 172-177. For the grants of the Bhanja chiefs of the south see *Journal of the Asiatic Society of Bengal*, Vol. VI, pp. 665-671 ; *Epigraphia Indica*, Vol. IX, p. 275 ; Vol. XI, p. 99 ; Vol. XII, p. 323 and 326 ; *Journal of the Bihar and Orissa Research Society*, Vol. II, p. 173 ; Vol. VI, p. 269 and 276.

Indian States. Mayurbhanj.

As a matter of fact, the ruling families of Baud, Daspalla and Gumsar are connected not with the Brahmanic Gotra of Vasishtha, but with that of Kasyapa.*

" In this note we are concerned with the Bhanjas of the north, particularly with the ruling family of Mayurbhanj. In the grants of the Bhanjas of Khijjinga referred to above we meet with four generations of Bhanja Rajas who probably flourished in the 11th and 12th centuries. In the line of the miraculously born and probably mythical Birabhadra Adibhanja was born Kottabhanja who is described as ' a fire to the forest of (his) foes.' Kottabhanja's son was Digbhanja, ' whose feet were worshipped by hundreds of vassal kings, who placed his own feet on the head of the greatest of kings.' Digbhanja was succeeded by his son Ranabhanja ' who lived at *Khijjingakotta*,' and ' whose sins were destroyed by the worship of Hara (Siva)'. Ranabhanja's successor was his son Rajabhanja who also was a worshipper of Siva. In the genealogy of the present ruling family Ādibhanja is represented as the son of the Rajput pilgrim Jai Singh from Jaipur, but Kottabhanja, Dighbhanja, Ranabhanja and Rajabhanja find no mention. But in spite of these omissions, the origin of the present ruling family of Mayurbhanj may with good reason be traced to the old Bhanja family of Khijjinga. The title *Bhanja* and the identity of the Brahmanic Gotra (Vasishtha) indicate such origin. The horoscopes of Brahman inhabitants of Mayurbhanj often begin with a reference to the ruling chief. In one of the horoscopes (brought to my notice by Pandit Tarakesvara Ganguly) of the time of Maharaja Jadunath Bhanja (the great-grand-father of the present chief), he is called the lord of the happy realm of Brāhmanghāti, ' a descendant of the solar race,' ' brought up by the great sage Vasishtha,' and ' is the protector of cows and Brahmans through the kindness of Kinchakesvarī.' In another horoscope of the time of Maharaja Krishnachandra Bhanja (the grand-father of the present chief) he is described as descended from a family born of the egg of the peahen. Whatever the historical value of the legends relating to the origin of the family may be, these horoscopes show that genuine local tradition connected the present ruling family of Mayurbhanj with the ancient Bhanja family of Khijjinga mentioned in the copper-plate grants.

" Among the sites of Mayurbhanj visited by me in my short tour, Haripur, Māntri and Barsai have already been described by Mr. Nagendra Nath Vasu in his *Archæological Survey of Mayurbhanj*, Volume I. But Khiching far surpasses all these sites in antiquity and importance, and so a short account of the ruins of Khiching may be given here. The site was visited by Cunningham's Assistant, Mr. J. D. M. Beglar, between 1874 and 1876 and is described under the name Kichang in Cunningham's Report, Volume XIII, pages 74-75. There are ruins of two fortified palaces at Khiching. The more extensive one on the river Khairbhandan is now known as Viiātgarh, and the other Kichakgarh after well known characters in the Mahabharata. But the chief centres of interest at Khiching, both to pilgrims from the neighbouring districts and to archæologists, are the temples and sculptures within the Thakurani's compound. The Thakurani or the ' goddess ' also called *Kinchakesvari*, who is the family deity of the ruling chief, is represented by an image of Chamunda in three pieces now installed in a small plain brick-built shrine on a mound in the centre of the compound. But the image still rests on evidently the original pedestal around which stood the old temple.

* I am indebted to Babu Basudeo Misra, Superintendent of the Baud State and Babu Bhabagrahi Biswal, Superintendent of the Daspalla State, for the Gotra of the ruling houses of those States.

"In front of the shrine of the Thakurani on the same mound stands the *Khandiya* *Deul* or 'unfinished temple'. The four walls of the square cella are nearly complete. They are built with materials of older temples. The work was probably abandoned before the building of the *sikhara* or *manjeri* could be taken in hand. The decoration on the door lintel and the door jambs, the scroll work and the figures of Ganga and Yamuna are perfect in finish, and against the background of the plain wall appear exquisitely beautiful (Pl. XLI, fig. *d*).

"Around the *Khandiya Deul*, under a shed near the mound and on both sides of the road to the compound lie scattered a very large number of images and sculptures. In fig. *e* of Plate XLI are reproduced two images of the sun-god belonging to this collection, one of which is seated. The faces of most of the images are in good preservation, but the bodies are broken. All sects including Buddhist and Jain are represented in the collection. The peculiar scroll decoration or absence of decoration of the back slab, and the careful finish even of the lower half of the figures, reveal the existence of a local school of sculpture that grew up in isolation.

"The Thakurani's compound was originally surrounded by a brick wall of which traces are still visible. Within the compound beside the mound on which stand the small shrine of Thakurani and the *Khandiya Deul*, sites of three other temples marked by sculptures and building stones are still pointed out, *viz.*, Dhavalesvar Mahadeva, Jatesvar Mahadeva and Siddhesvar Mahadeva.

"But one temple within the compound, that of Chandrasekhara, is still standing (Pl. XLI, fig. *b*). The plinth (*kati*) and the walls (*bhitti*) of the cella (*garbha*) are almost intact. Of the *sikhara* (spire) only the *amalasāra* (finial) has fallen down. The decorations of the lintel and the jambs of the doorway and the figures of the door-keepers, Chanda and Prachanda, are well-finished (Pl. XLI, fig. *a*). This temple is now out of plumb and inclines backward. One very peculiar feature about this and other temples of Khiching is the absence of any *Mukhamandapa* or porch. This feature shows that the architecture of Khiching stands apart from the great Orissa group of temples and is more closely related to the style of Bengal.

"Outside the compound of the Thakurani there were a good many temples. Ruins of two of these, *Itamandia* or 'the Brick Hall' and *Kutāi Tundi* deserve notice. The mound at the site of *Itamandia* still hides the remains of a brick temple. Early in 1908 Mr. Kamakhyaprasad Bose found here an inscribed image of Marichi (Pl. XLI. fig. *f*) and a small inscribed image of Avalokitesvara, and dug out a big image of Buddha in the earth-touching attitude now resting under a tree on the road leading to the Thakurani's compound. The workmanship of these images from *Itamandia* is inferior and should be assigned to the declining period of Khiching.

"But by far the most precious relic of antiquity at Khiching is the ruined temple of Nilakanthesvar popularly known as *Kutāi Tundi* (Pl. XLI, fig. *c*). It is a small temple in the Indo-Aryan style, without porch, and is situated in the open country about 500 yards to the north of the compound of the Thakurani. The plinth of the temple is

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buried in débris. Most of the missing carved stones that decorated the façade of the temple lie buried in the débris that has accumulated around the plinth. When in perfect preservation this temple was really a gem and must have compared favourably with the best of the temples of Bhuvaneshvara. The spire has a dangerous crack and is sure to collapse unless adequate measures are taken for its preservation. If this masterpiece of architecture is to be handed down to posterity it will probably be necessary to dismantle the whole structure and then rebuild it with the old materials.

"Between the Thakurani's compound and the temple of Nilkanthesvar is the site of the temple of Hara-Gauri. In 1908 Mr. Nagendra Nath Basu dug out from a place near by an image of Hara-Gauri in three pieces. On the pedestal of this image is engraved this stanza :—

1. *Om rājñyaḥ 'srī-Rāyabhañjasya Lokeso Bhagavān ayam.*

2. *'Srī-Dharaṇīvarāheṇa saha kīrttyā vinirmitaḥ.*

"'This (image) of the Lord Lokesa of Rāja Srī Rāyabhanja is made with distinction by Sri Dharanivarāha.'

"*Rāyabhanja* is the Prakrit form of the name Rājabhanja, and this Rājabhanja is evidently no other than the king of the same name mentioned in a copper-plate grant. A very big tank called *Rāṇabhanj-pukur* probably perpetuates the name of Raja Rāṇabhanja. Thus the earliest and most beautiful of the temples and sculptures at Khiching should be assigned to the time of the early Bhanja kings named in the copper-plate grants, *i.e.*, to the 11th or 12th century A. D. Structures like the *Khandiya Deul* built on an older mound and the remains of laterite temples indicate that the prosperity of Khiching continued for a few centuries more. But it will not be possible to recover the lost history of the site till the mounds, etc., are explored with the spade."

SECTION III.

Epigraphy.

Rao Bahadur H. Krishna Sastri, the Government Epigraphist, reports that he deciphered twenty-seven inscriptions this year both for members of the department and for outsiders. "They were all votive records," Mr. Krishna Shastri writes, "ranging between the 5th and the 15th centuries A.D. One of them, a *prasasti* in the Kanarese language, of the Rashtrakuta King Krishna III, was discovered at Jura. Another record sent for decipherment by Dr. Ananda K. Coomaraswamy, Museum of Fine Arts, Boston, is also an old Kanarese record of about the 11th century A.D. and comes from a Siva temple called Trailokyamallesvara, probably identical with the present Mallikarjuna sanctuary standing at Kuruvatti in the Bellary District of the Madras Presidency. Possibly it belongs to the reign of Trailokyamalla-Ahavamalla-Somesvara, the Chalukya King who reigned from A.D. 1040 to 1068. The image of Brahma below which the inscription is cut was the work of the Jaina sculptor Chāvundoja. A cuneiform record from Ur in Mesopotamia was sent by the Curator, Lucknow Museum, and a pencil eye copy of a Pehlevi record round a Persian cross by Mr. T. K. Joseph. The latter was discovered at Kattamarram in North Travancore. The decipherment of these two will have to be arranged for by scholars acquainted with these characters. The Kirari and Adbhar inscriptions discovered by Mr. Lochan Prashad Pandeya and sent to this office for examination will be duly noticed in the sequel, under 'work done in the various Circles'.

"It is encouraging to report that several interesting articles have been contributed to the *Epigraphia Indica* during the year, by officers of the department. The Government Epigraphist himself has contributed articles on the important Velvikudi grant, dealing with the early Pandya history, and the Vayalur pillar inscription of the Pallava King Rajasimha II. The Superintendent for Epigraphy and the Assistant Superintendent for Epigraphy (Dravidian) also add their contributions on the very interesting Nalanda copper-plates, the Nidūr Tamil Inscriptions (in verse) and the Christian plates from the Palaiyur Church. From the office of the Assistant Archæological Superintendent for Epigraphy, Southern Circle, Madras, comes a good article on a Kakatiya copper-plate record by Mr. C. R. Krishnamachari. Mr. R. D. Banerji contributed 16 articles, Rai Bahadur Daya Ram Sahni 3, and Mr. Dikshit 1. It is hoped that other scholars in the department will also contribute and make the journal richer on that account by printing their historical discoveries in its pages.'

The Government Epigraphist for India was on tour for about one month inspecting certain inscriptions which are under publication in Volume V of the *South Indian Inscriptions* (Texts), as well as the well-known Udayagiri and Khandagiri caves in Orissa. While investigating the latter in respect of a few doubtful points connected with the well-known Kharavela inscription in the Hathigumpha cave, he compared the readings of the other records also on the Udayagiri and Khandagiri caves, published by Mr. R. D. Banerji, and found that some of them required revision. "The reading *Hathisa Hamsa papotasa* in line 2 of the inscription in the Svargapuri cave given by Mr. Jayaswal (*Journal of the Bihar and Orissa Research Society*, Volume IV, page 369) and *Hathisahasa papotasa* by Mr. Banerji (in *Epigraphia Indica*, Volume XIII, page 159) should be corrected into *hathisahasa-payatasa* and translated 'of *Lalāka* (not Lālāka or Lālaka as read by other scholars) *who died in a struggle with an elephant*'. The

reading *papotasa* is not warranted, nor is there any reason to have it when the names of the father and the grandfather are omitted, and when the epithet *papotasa* which suggests the name of a male cannot reasonably be applied to the queen of Kharavela. Similarly Mr. Banerji's *Kharasa* in the Manchapuri (Martyapuri ?) cave record, which was taken to be *Verasa* by Messrs. Prinsep and Bhagwan Lal, should be read '*Airasa*' as shown by comparison with the word 'Airena' occurring in the Hathigumpha inscription. Of the well-known Kharavela inscription in the Hathigumpha cave, duplicate ink impressions were made in order to verify the remarks of Mr. Banerji on its palæography in one of his latest contributions to the *Epigraphia Indica* (under publication); and the opportunity was not lost to compare at the same time the original with the text published in a most scholarly paper by Mr. K. P. Jayaswal, M.A., in the *Journal of the Bihar and Orissa Research Society*, Volume IV, pages 364 to 403. A few differences were noted and the most important of these are given below:—

	Jayaswal's Reading.	*Revised Reading.*
Line 5	*sa-bilama dhite*	*sa-bāhu-vijite*
,, 8	*yēra naridō nāma*	*yavanarāja sāma*
,, 10	*kārāpayati*	*kārayati*
,, 11	*kētubhada*	*kaïbhada or kaïbhida*
,, 11	*vitāsayati*	*vitōsayatō*
,, 13	*hathi-nāvana*	*hathi-nivaha*
,, 14	*asāsitāni*	*rasa-satāni*

"In the Hathigumpha cave were also copied about 10 to 15 small epigraphs in characters of the 10th or 11th century A. D. These together with the epigraphical notes of the Government Epigraphist will form a contribution to the *Epigraphia Indica*. While studying the records in the caves, the sculptural scenes depicted on them were also examined. It is not unlikely that some of these may be of interest to scholars. On the Ganeshgumpha cave, which has two chambers separated by a rock-cut wall and a verandah, is seen in relief a frieze which apparently depicts a story: To the proper right end of the verandah is the figure of a king sleeping under a tree at the arched entrance of a house. His consort is seated near his legs with her right hand resting on his left thigh. A woman approaching is seen representing something to her and is leading a male by the hand. Next to this scene are a man and a woman fighting with swords and shields in their hands. The scene is continued, where a man carrying a woman is figured. On the frieze to the proper left end of the verandah are represented a king and a queen riding a caparisoned elephant. The king is turning backwards and shooting arrows against a few soldiers, who seem to be chasing him with swords and shields in their hands. One of them has fallen and is seen lying dead on the ground. Beyond this is shown a tree, and then an elephant kneeling with the king and the queen just descending from its back, flanked by a servant on each side. Next, the king and the queen are represented as walking home, where the queen is seen seated in an exhausted posture, with her head leaning on her left hand which itself is supported by her raised left knee. The king is seen consoling her with folded hands. It is curious to observe that this same scene is also depicted with very slight changes on the upper storey of the Ranigumpha.

"This Ranigumpha lies at a level lower than that of the Hathigumpha towards the east. Here we notice a scene representing a king attended upon by an umbrella-bearer

approaching a group of women carrying pots on their heads. A caparisoned horse reminding us of Kanthaka, the favourite horse of Gautama Buddha, also appears on the scene. On either side of the main row of cells facing east are two small *mandapa*-like cells with ornamental arched entrances. Over the right cell are to be seen what looks like a *dharmachakra*, the *triratna* symbol, elephants and monkeys. On the left is depicted a forest scene showing a man in a resigned attitude. Over the proper left flank of the lower storey of this Gumpha is a chamber with a verandah having three arched entrances and the usual rail ornament connecting the arches. At the proper right end of the verandah of this chamber, the decorated frieze commences with the figure of a tree, and near it are a man and a woman in an attitude of worship. The woman has square ear ornaments while the man has round ones. In the next compartment is shown a king with a queen on each side seated on a stone bench and in a worshipping posture. In the next panel we see a dancing scene with the drum, the lute, the cymbals, guitar or bassoon and the flute played upon by women. In the third panel on the proper left side is to be noticed a group of worshippers with gifts, probably a husband, a wife and their son. At the proper right end outside the verandah the figure of a guard is seen equipped with a long spear and with a short dagger in his waist. The corresponding figure on the left side is entirely damaged.

"The upper storey exhibits some remarkably realistic sculptures showing the nature of the apparel used in the 2nd century B. C. (?). The sculptured figures too are very artistic. A flying Gandharva is seen with a plate of flowers, fruits, and a garland in his left hand, while his right hand carries a twig of flowers and buds. Then comes a king attacking three wild elephants while his queen with one of her hands is holding a garland raised towards the latter. A female attendant holds the left leg of the king while another drags back by the hand the first mentioned lady. A third lady aims to strike, possibly at the elephants, with a lotus stalk. A fourth woman drags back a kneeling female while two others carry still another with arms resting on the shoulders. Then is shown a tree and then comes the scene already described above, in the Ganeshgumpha.

"On the next panel we see first a man carrying a set of pots hung from a staff placed across his shoulder. In front of him walks another person with a cudgel raised in one hand while further in front of him walks a third man with a *chowrie* in the right hand and holding up an umbrella with his left. Before him is figured a steed led by a dwarf. Beyond these is an archer aiming at a deer which is hurt and looks back. The archer is then shown moved at the piteous sight of the animal. In front of him is a woman seated on a tree as if asking the archer to stop shooting. Then is shown a queen seated on a raised seat attended upon by her servants. The rest of the frieze in the verandah is badly damaged, though in one place we can make out two couples seated on two separate raised seats near each other.

"The cave known by the name of Jayavijaya-Gumpha has a frieze between two arched entrances which also exhibits a scene worth noticing. It contains a sculpture possibly representing the *bodhi* tree enclosed in a railing with an umbrella above and worshipped by a human couple on each side. The males are folding their hands in adoration. Of the females one is pointing upwards with her left *tarjani* while the right hand holds a plate of flower-garlands. The other lady holds her right hand in the *vismaya* posture while her left hand carries also a plate of flower-garlands. On either side of the verandah is a standing figure. The one on the proper left is of a woman on whose hand perches a parrot. She wears an elaborate head-dress. The one on the

proper right is of a man who is probably the husband of this woman. These perhaps represent the two donors.

"The *Chhota* Hathigumpha lying to the proper left of the lower storey of the Alakapuri-Gumpha shows some fine life-like elephants. Its entrance is marked by an inscription, which has been read thus by Mr. Banerji in *Epigraphia Indica*, Volume XIII, page 164, No. IX:—

Agikha (?)................*sa lēṇam.*

On closer examination, however, from the stone, I read '*Aā* [*-aya*-skt. *Arya*] *Dhamarakhitasa lēnam*'. "This is the cell of the venerable Dharmarakhita (*Dharmarakshita*)."

"On the Khandagiri hill, the Ananta-Gumpha and the Navamuni-Gumpha show some reliefs which may also be noted. The former consists of a chamber with vaulted roof and four arched entrances with a flat-roofed verandah in front. The arches are decorated with three hooded serpents and *nandipāda* or *triratna* symbols. Between the arches are friezes with floating Gandharvas in *mandapas* either plain or surmounted with alternating *stupa* and tree ornamentations. The arches are supported by ribs and bear underneath them the figures of elephants in different postures, a king with his two queens riding a chariot drawn by two horses and flanked by the sun and the moon. In front of him is seen a servant seated, bearing a spouted vessel and a flag on a staff. In one of the arches is carved the figure of a standing *Gajalakshmi* holding lotus stalks in her hands, and flanked by elephants standing on lotuses and holding a *kalasa* in their trunks. Behind the elephants parrots are to be seen, one on each side, perching on a lotus and pecking it. On the proper left arch is shown a *bodhi* tree railed at the bottom and surmounted by an umbrella. On its proper right there is a chief in a saluting posture while on the proper left is a woman, his wife, offering a garland. Both of these are attended upon by a servant with a plate of garlands and a spouted vessel. On the back wall of the chamber we see in relief a *svastika*, a *nandipāda* on a pedestal, and a tree flanked on either side by a *triratna* on a pedestal. Below these, removed to one side there is an unfinished image of a standing Jina (perhaps of a later date) attended by two chowrie-bearers.

"The Navamuni-Gumpha shows in relief some well-cut figures of Jaina *munis* in meditation, wearing head-dresses under triple umbrellas and attended by chowrie-bearers. Below them their respective symbols are also shown, of which the monkey, the horse, the elephant and the bull, the cognizances of Abhinandana, Sambhavanatha, Ajitanatha and Rishabhadeva respectively, are quite clear. Below two of these (perhaps Parsvanatha, as they have a seven hooded serpent at the back), two Nagas are figured in the attitude of adoration. A row of female deities figured below the *munis* are perhaps their respective Yakshis (?) with their symbols and weapons. On the right side of these latter is the figure of Ganapati always found in the row of the Brahmanical *Saptamātrika* images.

"On my return from Khandagiri I visited Kodavalu to examine there the inscription on a rock-cut well. A revised edition of this Andhra inscription, noticed some years ago by Dr. Sten Konow in the *Archæological Survey Report* for 1919, will soon be published in the *Epigraphia Indica*. Traces of a Buddhist *stupa* on the top of the Kodavalu hill indicate its importance and it appears worth the while of the Archæological Superintendent, Southern Circle, to excavate the monument for further historical relics.

"A short tour was also undertaken by Mr. Hirananda Shastri, the Superintendent for Epigraphy, in Malabar, in order to examine there the Vedic antiquities mentioned by Mons. Jouveau Dubreuil and to copy inscriptions. A few hitherto unknown inscriptions belonging to the reigns of the early Chera Kings, Bhaskara Ravi Varman, Indu or Indisvara Kōdai, Rāman Tiruvadi and Kodai Ravi as well as of the Kerala Chief Kumaran Ravi were copied. These will be reviewed in detail in the Annual Report of the Assistant Archæological Superintendent for Epigraphy, Southern Circle, Madras, for the year 1923-24. The discoveries of Mr. Hirananda Shastri show clearly that Malabar properly explored is sure to yield many early Chera inscriptions of which so far, we have very few in the Epigraphical collection.

"Mr. Hirananda Shastri's investigations of the ancient underground cellars in Malabar which Prof. Dubreuil assigns to pre-historic or Vedic times. have not been quite so successful. He inspected these curious monuments at Taliparamba and Padinyattamuri which had already been examined by M. Dubreuil. and opened another small one near Bangala Motta Paramba which had not been explored before. A few more of the same kind have been located and await further exploration. The construction of these underground laterite houses, whose surface appearance is indicated by the inclining entrance and the top-opening of laterite, covered also by a piece of laterite, establishes as has already been observed by the French scholar a close resemblance to the shape of the Buddhist *stupa*. It therefore appears highly desirable to explore scientifically a few more monuments of this kind for the light they may throw on the vexed question of the origin of the *stupa*. Some scholars hold that the *stupa* arose from the tumulus, but others trace it to the curvilinear bamboo roof of the primitive hut shrine. Similarly there are antiquarians who say that it represents the little mound covering the closed urn in which the ashes of the dead were buried in Vedic times. Regarding the opinion of Prof. Dubreuil that these were used as houses for the sacred fire and for Vedic sacrifices, Mr. H. Shastri says :—'I am not prepared to agree with Prof. Dubreuil in regard to the supposed fire. The fire connected with funeral rites is different from the fire which a householder had to keep alive. or the fire which is connected with *Agnishtoma* rites. The *Agnidhriya* fire. I think. is not sepulchral (see Barnett, *Antiquities of India*, page 163, etc.). There might have been larger excavations which we have not yet seen and which might show signs of different fire-hearths of *dhishnyas* connected with Soma-pressing and the *Agnidhriya* fire. The small caves were possibly meant for depositing the ashes of the dead. But before we can reach definite conclusions a larger number of caves ought to be explored.'

"Many interesting articles appear as usual in the published parts of the *Epigraphia Indica* and much headway has been made in bringing the journal up to date. the part for the current quarter ending October 1923 being ready for issue. Two parts of the journal, namely the fifth part of Volume XVI and the eighth part of Volume XIV, were passed for printing and issue and have appeared in the year under review. Two more parts, namely the 6th and the 7th of Volume XVI, which have also been passed for printing and issue, have not yet been printed off owing to the delay in the receipt of plates from London. Of these four parts, only one, *viz.*, VIII of Volume XIV appears under the editorship of Dr. F. W. Thomas. The remaining three parts issue under the joint editorship of Dr. Thomas and the Government Epigraphist for India. These four include the astronomical tables drawn up according to the Arya Siddhanta

'True' system by Mr. Sewell, which are so very useful for our calculations of inscriptional dates. The three Kshatrapa records of Rudrasimha I and Rudrasena I edited by Mr. R. D. Banerji, and the one of the Kshatrapa Svamin Jivadaman by the same scholar are interesting and valuable, that of Rudrasena giving the longest pedigree of the Kshatrapas of Surashtra and Malwa contained in a single record. Svamin Jivadaman was the father of the Kshatrapa Rudrasimha II who, as determined from his coins by the editor, ruled over Saurashtra in the third and fourth decades of the 3rd century A. D. It might be stated that Svamin Jivadaman was the founder of the third dynasty of the Satraps of Saurashtra, as Ghsamotika was of the line of Chashtana. According to the late Pandit Bhagwanlal Indraji and Professor Rapson, Swamin Jivadaman must have been a scion of some younger branch of the family of Chashtana. This epigraph throws considerable light on his hitherto obscure personality, and, as Mr. Banerji says, 'furnishes us with three important items of information regarding him: the minimum extent of his reign, *viz.*, 13 years, his date Saka 201 (=279 A. D.) and the locality of the principality over which he ruled, *viz.*, the region about Sanchi.' Next to these may be noted the important copper-plate grant of the time of the Kalinga King Indravarman, dated in the year 149 of the Ganga era. The commencement of this era has not yet been finally fixed, but it lies certainly some time in the 6th century A. D. Palæographically the plates may be referred to about the beginning of the 7th century A. D. They were issued from Dantapura, which Mr. Ramdas Pantulu, the editor, believes to have stood on the place which is now shown as the site of the fort of Dantavaktra, close to the Buddhist village of Siddhantam (*Siddhar-thaka-grama*). The Garra plates of the Chandella Trailokyavarman of the Vikrama year 1261 form another interesting publication of the year. They belong to the well-known Chandella dynasty of Bundelkhand called *Chandratreya* in the inscriptions, and give us the earliest known dates for Trailokyavarman which bring us within two years of the date of the death of Paramardi his predecessor and of the fall of Kalanjar and Mahoba (April 1203 A. D.). The documents show that Trailokyavarman was able to re-establish his power and retrieve to a considerable extent the waning fortunes of his dynasty, shortly after the catastrophe at Kalanjar. It is also interesting to note that the grants mentioned in the record were made 'by way of maintenance for death,' unquestionably, that of the father of the donee who is stated to have been killed at Kakadadaha in a battle with the Turushkas. The dates given work out correctly for the southern expired Vikrama years with *amanta* months, which is rather rare to find in northern inscriptions. The two Kadamba grants of Ravivarman and Krishnavarman which come from Sirsi in the North Kanara District are published for the first time by Dr. V. S. Sukthankar. Their chief claim to our attention lies in the regnal years in which they are dated. The grant of Ravivarman appears to be made in the thirty-fifth regnal year, or some twenty-five years after the regnal year 11 of the Kadamba Ravivarman of the Halsi and the Nilambur plates published by the late Dr. Fleet in *Ind. Ant.*, Vol. VI, page 25 ff. The other grant belongs to the 19th year of the Dharmamaharaja Krishnavarman of the Kadamba family whom the editor of the record identifies, on palæographic grounds, with the second king of that name whose published Bannahalli grant is dated in the seventh year of his reign. Dr. L. D. Barnett has been the largest contributor to the *Epigraphia Indica* this year and publishes seven records of the Rashtrakuta kings, Krishna II, Krishna III (both called Kandara or Kannara-Vallabha, entitled *Akālavarsha*) and Nityavarsha-Amōghavarsha whom Dr. Barnett identifies with Nityavarsha

Khottiga, the younger brother of Krishna III. One of the records of Krishna III refers to the (Western) Ganga Viceroy Butuga who was the brother-in-law of Krishna III. Dr. Barnett also edits three Western Chalukya records one of which mentions a Chalukyan Queen as the Governor of a Province. The remaining contributions concern Vijayanagara copper-plates. An important record among these is one which is edited by Mr. C. R. Krishnamachari, the Publication Assistant in the office of the Assistant Archæological Superintendent for Epigraphy, Madras. It brings into prominence for the first time a subordinate family of *samantas* who were of the Matla family and belonged to the solar race and the Chola lineage (being hence also called *Deva-Chodas*). One of the members of this family named Ananta is known to have distinguished himself as a famous Telugu poet. It is worthy of note that Mr. Krishnamachari in editing these plates has made a valuable suggestion in the interpretation of the passage *vijity-ādattē-smād-Avanigiri-durgam* which occurs in almost every Vijayanagara record of the third dynasty and has been uniformally misinterpreted: 'conquered and took from this (chief) the (hill fortress called) Avanigiridurga.' Mr. Krishnamachari's suggestion that we must divide the passage '*vijity-ādattē-sm-Ādavani-giridurgam*' and translate 'conquered and took the hill fortress of Adavani' is quite reasonable, since the existence of a hill fortress by name *Avanigiridurga* is unknown and particularly because *Ādavani* (Adoni) is mentioned among the conquests of Rāmarāja of the third Vijayanagara dynasty in the Telugu literature devoted to his praise. Two important records for the history of the Nayakas of Madura have been published as contributions by the late Mr. T. A. Gopinatha Rao and the late Mr. V. Natesa Ayyar, whose early death has removed from our little band of Epigraphical scholars one of its most promising men. The first is incised on seventeen and the second on seven copper-plates both belonging to the reign of the Karnata king Venkatapati-deva Maharaya and are dated in the Saka year 1520. They give the complete genealogy of the Nayakas of Madura and their exploits in some detail. The grants which these inscriptions register were made by Venkatapati-deva Maharaya, the most famous of the Vijayanagara emperors of the third dynasty, at the request of prince Krishna-Bhupati, the then ruling Nayaka of Madura. In this connection we are told that the heroic Visvanatha Nayaka, the earliest chief of the latter dynasty, conquered the *Tiruvadi* or the king of Travancore and other rulers in a pitched battle and became the lord of Madura, thus laying the foundation of the Nayaka dynasty of Madura during the reign of Sadāsiva Raya, the last king of the second dynasty of Vijayanagara. Another of the later copper-plate records belongs to the end of the 17th century A. D. and while recording a grant by the presiding teacher of the Sarada-Matha at Conjeevaram to a certain Rama Sastri refers to the sanction received from the famous Golkonda Brahman ministers Akkanna and Madanna. The editor, Mr. S. V. Visvanathan, M.A., adds translations of three very interesting passages taken from the Dutch journal *Havart*, concerning these two State Officers of the Nawab of Golkonda, Abu Hassan Qutb Shah, whose drawings from life are given in the Madras Epigraphical Report for 1915, page 117 ff.

"Volume IV of the *South Indian Inscriptions* (Texts) was passed for printing and issue from the Government Epigraphist's office during the year under report. It comprises in all texts of 1415 inscriptions including a few records already published, to which however, full references are given. It is impossible to review in full the contents of

this huge volume. The inscriptions included in it embrace almost all the dynasties which held sway in Southern India, from the 7th down to the 17th century A. D. Generally they record gifts of lands or money or cows given to temples for various purposes. A few refer to the foundation of temples and villages. Some are political compacts entered into by Subordinate Chiefs with the ruling king of the country. The most interesting Tamil inscription published in this volume is the one found engraved below the sculptured panels in the Vishnu temple called Vaikuntha-Perumal at Big Conjeeveram. It consists of a number of labels written in Grantha characters of the 9th century A. D., to explain the sculptured scenes above them. The scenes represent the events that took place immediately after the death of Paramesvara-pottavarman II, the last of the Pallava Kings of Kanchi, whose line commences with Simhavishnu. Evidently Mahendravarman III, the younger brother of Paramesvara II, died before him and the latter died without issue. It is stated that there being no king to rule the country after the death of Paramesvara, the *Mahamatras* and the *Mulaprakritis* along with other chiefs of men approached Hiranyavarma-Maharaja, evidently a member of the collateral branch of Bhimavarman, the younger brother of Simhavishnu and representing to him the fact of the king's death, requested him to give them a ruler. Hiranyavarman sent for the principal chiefs and his own sons and enquired which of them would go. Seeing that all refused the offer, Pallavamalla, one of the sons of Hiranyavarman, aged only 12 years, accepted it; but his father was unwilling to send him. Thereupon a certain Dharnikondaposar told the king that this son of his possessed high qualities like those of Vishnu and was destined to become an emperor. Then the father consented and the young prince marched to Kanchi where he was received with royal honours and anointed as king under the name Nandivarman with the title of *Videlvidugu* which means 'the crushing thunder-bolt'. Another important Tamil record published in this volume, which is however much damaged, comes from Mamandur and belongs to the Pallava emperor Mahendravarman I of the 7th century A. D. who may rightly be regarded as the greatest figure in the history of Tamilian civilization. He was an artist, a poet, a musician and an architect, and his work, the burlesque *Mattavilāsaprahasana*, which is still staged in Malabar, is already widely known. Almost all the Kanarese and Telugu inscriptions so far discovered at Hampi (Vijayanagar), the last great capital of the Hindu Empire of the south, are published in this volume and are of very great value for arriving at its correct history. The most noteworthy of them is a poetical record of Lakshmanamatya, minister of Devarāya I, (A. D. 1406 to 1418), and the nephew of the famous literary brothers Sāyana and Mādhava. Lakshmana was himself a poet of great merit and the patron of the Kanarese poet Madhura. Another fine record of the period is a *prasasti* of the great king Krishnaraya of the same family (General No. 789) which gives us a clear insight into the peaceful state of his vast kingdom and the all-round progress that was the result of his efficient rule. The numerous Telugu records of Drāksharāma which also appear in the volume, supply a fund of material to the Telugu scholar and research student.

"The Assistant Superintendent for Epigraphy, Southern Circle, Madras, continues to publish his Annual Report separately. The total number of epigraphs examined by his office during the year was 779, of which 688 were actually copied this year while the remaining were the balance left unexamined last year. Fifteen copper-plate records were also secured for examination. 522 pages of manuscript containing supplemental

matter for *South Indian Inscriptions* (Texts) Volume VI and 2.596 pages for Volume VII, were prepared and sent to the Press. For Volume VIII of the same series were also got ready about 254 pages of manuscript. A valuable discovery was made by Mr. K. V. Subrahmanya Ayyar, Assistant Superintendent in the office of the Government Epigraphist, while he was in Madras for a few months acting as Assistant Superintendent, Madras, in place of Mr. Venkoba Rao. In the dark interior of the Varaha cave temple at Mahabalipuram which had been examined several times before, he investigated again the fine statues in the niches to see if these bore any labels. The figures had been noticed long ago, but their identity is only clearly established now by the inscriptions discovered by Mr. K. V. Subrahmanya Ayyar. They are written in the early Pallava-Grantha characters and indisputably prove that the two groups of royal personages above which the records are cut, are the portrait figures of the Pallava kings Simhavishnu and Mahendravarman with their respective queens. These with the necessary photographs will be published shortly as a Memoir of the Archæological Department. Another Pallava record of Nandivarman, also secured by Mr. K. V. Subrahmanya Ayyar for examination, informs us that Nandivarman assumed kingship while he was yet young and thus confirms what was stated already about him in the Conjeeveram inscription of the Vaikuntha-Perumal temple. A number of records of the Vaidumba line of kings of the 8th and 9th centuries were copied during the year. These kings claim to have been the lords of the Renandu 7,000 country and with the Banas and Gangas seem to have played a very important part in the history of the central districts of the Madras Presidency in the 8th and 9th centuries A. D. till they were all brought under subjection by the Chola Emperors. In the records of the Western Chalukyas examined this year, we may particularly note the relationship which the Nolamba-Pallavas bore to the Imperial Chalukyas. There are inscriptions also in the collection of the Southern Circle which introduce for the first time the names of new personages: for instance, a hitherto unknown queen of Vikramaditya VI is mentioned whose name was Priyaketaladevi and who was styled *Abhinavasarasvati* on account of her high attainments in music and knowledge of many languages. A new queen of the Chola King Parantaka I was Seyya-Bhuvanasundari-Maniyar. Two records of Kulottunga I, dated in his 34th and 36th years found this year in the Tanjore District, approximately settle the question of the time to which Vira Keralan Adhirājarāja-dēva, the Chera king of Kongu belonged, and prove it to be the beginning of the 12th century A. D. In the collection of inscriptions of the Vijayanagara dynasties, the one belonging to the time of Harihara II (A. D. 1397) deserves notice as mentioning the great Jaina General Irugapa Dandanatha, as the *Mahāpradhāna* and the *Rājyapratipālaka* of Harihara. Hitherto he was supposed to be a minister of Bukka II, the son of Harihara. Among the later inscriptions noticed in the year under report, mention may be made of one which refers to a Nayaka chief of Damaral (Damal) named Chennappa Nayaka with whom the appellation *Chennapatnam* of Madras is to be associated. It was his son Damarla Venkatadri Nayudu who gave Madras to the East India Company with the sanction of the Karnata King Ranga VI in A. D. 1645.

"No epigraphical discovery has been reported in the Province of Bengal. The Archæological Superintendent examined afresh some records at the Ganesh temple in the Begunia group at Barakar in the District of Burdwan and ascertained the date

in which the temple was consecrated. The date is important inasmuch as it fixes the time when the style of architecture exemplified by the Begunia temples flourished.

"The thanks of the department are due to Pandit Lochan Prasad for bringing an inscription of high epigraphical value to the notice of the Archæological Department. It is written in Brahmi characters of about the 2nd century A. D. and is engraved on a wooden pillar now removed to the Nagpur Museum but originally found at Kirari in the Bilaspur District. The record is reported to have been a long one but unfortunately the surface of the pillar is now peeled off, taking away practically the whole of the record leaving only some twenty-three letters intact. Mr. Hirananda Shastri who had personally examined this pillar while he was Superintendent at Patna, notes in this connection as follows: 'The wooden pillar on which this ancient record was engraved is surmounted by what appears to be a *kalasa* and was in all probability a *Yūpa* or sacrificial post. If this is so, the present is the solitary instance of a wooden *Yūpa* yet found and this itself is a point of considerable interest. So far, we know only of three instances of stone *Yūpas* in India. Of these two were discovered in the river Jumna near Isapur opposite the city of Mathura (Muttra) in the year 1910 and one in the hill fort of Bijaynagarh near Baina in the Bharatpur State, some forty miles south-west of Mathura. In the Dutch East Indies four inscribed pillars of the kind have hitherto been found at Koetei and have been published by Dr. Vogel. Another instance of a *Yūpa-stambha* brought to our notice is in Mysore, near the Kōdandarama temple at the village of Hirimagalur. The Kirari pillar as we find it now, however, does not very much resemble the stone *Yūpas* nor does it appear to correspond exactly to the description of a sacrificial post given in the Satapatha Brahmana. The shaft may have been once octagonal but it is not bent over at the top as it should be according to the rules. We find however a seat above the *kalasa* at the top and this is a special feature of the sacrificial post. The householder performing the *Vājapēya* rites, for instance, had to climb a *Yūpa* and sit upon the seat at its top in token of his mounting to heaven.' The extant portion of the inscription, though not yet completely deciphered or understood, seems to favour the identity of the pillar with a *Yūpa* and may possibly show that it was set up by the householder Asi. The inscription and the pillar which bears it afford ample material for investigation and are consequently invested with unusual interest. What remains of the inscription will be published in the *Epigraphia Indica* by Mr. Hirananda Shastri.

"Regarding the work done in the Rajputana Museum at Ajmer, Rai Bahadur Gaurishankar Ojha says that he has examined some thirteen inscriptions in the year and that they are all of the mediæval period, ranging in date between the years 1154 and 1652 of the Christian era. They ascribe themselves to the rule of the various kings of *Ajamcree* (Ajmer) or *Medupata* (Mewar), and record mostly the construction of temples or memorials, grants of lands, etc. One of them, however, which was found near the temple of Ekalingaji, about 13 miles from Udaipur, while giving the genealogy of the solar family of Mewar, states that Rana Rajasimha, whom it mentions as fourth in descent from Rana Pratapa, the undaunted foe of Akbar to whose reign it belongs, weighed himself against precious stones in the Samvat year 1709 (or A. D. 1652). Another inscription engraved on the pedestal of a stone image in the Jaina temple near Gaumukha at Chitorgarh is dated in Samvat 1543, and mentions Sri Rājamalla Rājēndra as ruling over Chitrakūta-Mahadurga, the fortress of Chitor, at that time."

As regards the progress made in epigraphical work in the Burma Circle, Mr. Chas. Duroiselle informs me that the first part of Volume III of the *Epigraphia Birmanica* has been issued under the editorship of Mr. C. O. Blagden, and that the second part has gone through several corrections by Mr. Bladgen and is in the Press.

"The *Epigraphia Birmanica*, Volume III, Part I, contains, in continuation of those published in Volume I, Part II, of the same publication, the decipherment and translation with notes, by Mr. C. O. Blagden, of three of the early Mon inscriptions, which may be allotted to the 11th and 12th centuries A. D. The first of these, which, for the sake of convenient reference, has been called inscription No. IX, was originally found near the Tharaba Gate of the old City Wall. Pagan. It is in fragments, many of which, including the first portions. are missing. From the remnants it is calculated that the original must have exceeded over 1,000 lines, of which only less than half have been preserved. But in spite of this, it is by far the longest of the early Mon records that have yet been discovered. It records the building of a great palace at Pagan and the ceremonial attending the building. The name of the king is mentioned by his royal title; the precise times when the various actions took place are given, but unfortunately no year date is to be found in the fragments that remain. It is believed that the king referred to is king Kyanzittha, although the royal title mentioned in the inscription is that adopted by several monarchs of Burma, and it is calculated that the various dates mentioned therein best fit in with the end of the year 1101 A. D. and the early part of 1102 within the period covered by Kyanzittha's reign (1084-1112 A. D.). The inscription is unfortunately in a bad state of preservation, and Mr. Blagden says that if it were not for its many repetitions, a great portion of what remains of it would have been undecipherable.

"The other two inscriptions, Nos. X and XI, are short ones and do not call for any special mention. No. X records the dedication of lands to a pagoda somewhere near Pagan, and No. XI, the foundation of a *Sima* or Ordination Hall at Kyaukse. Neither of these contains any date. They have been included among the early records on palæographical and philological evidence."

"The number of new inscriptions found in Burma this year," Mr. Duroiselle says, "is 26, of which 21 were found in the Kyaukse District and the rest in Arakan. Twenty-five are in Burmese. Amongst those which are dated, the earliest bears the date 593 Saka-raja (or 1231 A. D.). All these inscriptions are of little or no historical interest being mere records of grants of lands or of religious buildings. One of them found at Shin-nge-det Taung, a small hill in the Mrohaung township of the Akyab District in Arakan, is written in late Gupta characters. Special mention has to be made of an inscription found at Taung-gup in the Sandoway District, Arakan, as it is written in archaic square characters which on palæographic grounds may be assigned to the early part or middle of the 13th century. This is the oldest Burmese inscription yet found in Arakan and definitely disproves the view held by the late Dr. Forchammer that the Burmese alphabet began to be used in Arakan only in the 15th century."

Mr. Ghulam Yazdani, the Government Epigraphist for Moslem Inscriptions, being absent in Europe as explained below on page 177, I regret to say that it is not possible to include in this Report any account of his work for the year 1922-23, as no statement has yet been received from him up to the time of going to Press.

SECTION IV.

Museums.

Indian Museum, Calcutta.

Mr. Ramaprasad Chanda held charge of the Archæological Section of the Indian Museum throughout the year, and sends me the following account of the very useful work he has accomplished. Mr. Chanda writes :—

"The work of re-arranging the sculptures in the Bharhut Gallery was begun early in the year. The small restored railing with one corner pillar and two short arms that stood in the southern part of the gallery was removed to the northern part and the restored railing made up of a few original pieces from the old railing of Bodh-Gaya was dismantled. As a result, sufficient room is now left in the southern part of the gallery for a partial reconstruction of the old Bodh-Gaya railing with the available original materials and casts of sculptures on certain of the railing stones still *in situ*. The middle pillar of the restored railing in the north-east corner of the gallery has been turned round so that the bas-relief illustrating the Mahakapijataka (No. 407) is now exposed to view, and the fragmentary medallions of certain rail pillars hitherto placed on the bench along the western wall have been placed on separate pedestals along the eastern wall. The sculptures in the Gupta Gallery have been re-arranged so far as practicable in chronological sequence, while, in order to relieve the monotony of the long passage down the middle of the gallery, the colossal statue of the Bodhisattva from Sravasti has been installed on a pedestal between Bays 1 and 20, a small pillar with sculptures in niches on four sides has been placed on a pedestal between Bays 4 and 17, a votive stupa has been set up between Bays 7 and 14, and the sculptures from Cambodia exhibited on a table between Bays 10 and 11. Door frames and other architectural pieces have been mounted on suitable pedestals in the eastern verandah. Some of the duplicate sculptures removed from the Gupta Gallery have been temporarily displayed along the walls of the lower half of the marble stair-case assigned to the Archæological Section, and the bigger and more mutilated specimens have been arranged in the cellars where they may be conveniently examined by specialists. In the work of re-arrangement of the sculptures Babu Paresnath Bhattacharyya, Gallery Assistant, rendered valuable assistance.

"Between 1890 and 1895, Sir Charles Elliot, then Lieutenant-Governor of Bengal, presented on behalf of the Local Government casts of the inscriptions of Asoka and of the inscriptions in the Udayagiri caves in Orissa, and built a small room known as the Asoka Court for exhibiting them. The room was demolished in 1903 in order to make room for the new wing of the Museum building. The casts were then deposited in the godown. Last year the casts of the rock edicts of Asoka at Girnar, Khalsi, Dhauli and Jaugada, of the pillar edicts of Lauriya Araraj and Lauriya Nandangarh, of the minor rock edicts of Sahasram and of other pillar and cave inscriptions of Asoka and of the cave inscriptions of his grandson Dasaratha were fixed on the walls of the south upper gallery of the new hall. The collection of casts of the pillar edicts of Asoka has been completed by adding a cast of Pillar Edict VII on the Delhi-Siwalik pillar.

"The antiquities other than coins acquired during the year by purchase, or received as presents, or in exchange, or on loan, number 283. This collection includes specimens dating from the palæolithic period to the middle of the 18th century A. D. Five palæolithic implements, five neolithic implements, and four perforated ring-stones have been received in exchange from the South African Museum at Cape Town. The Director General of Archæology in India has lent for exhibition 165 specimens excavated from the various sites of Taxila, such as the Bhir mound, Sirkap, Chirtope, Mora

Moradu and Jaulian, including terracotta figures and pottery of the Mauryan period together with metal objects, stucco figures and heads of the Gandhara School, and glass tiles, ranging in date from the first century B. C. to the fifth century A. D. Sir John Marshall has also enriched the collection by lending 71 Gandhara sculptures in stone and stucco excavated by the Superintendent of Archæology, Frontier Circle, from Sahribahlol and Takht-i-Bahi; but as the antiquities from Taxila, Sahribahlol and Takht-i-Bahi have been or are to be described in the special reports on the several excavations, they need not be further particularized here. **Indian Museum, Calcutta.**

" The most important acquisition during the year is a group of representative sculptures from Mathura containing both plaster casts and original specimens. In the previous year a plaster cast of the colossal Yaksha (?) statue in the round found at Parkham was installed in the Entrance Hall. Early this year we installed in the Gupta Gallery (Bay No. 1) a cast of the inscribed statue of Kanishka now in the Mathura Museum of Archæology which was excavated at Maṭ in the Mattra District. In the previous year casts of selected ancient Jain sculptures of the Mathura School from the Museums of Mathura and Lucknow were prepared at a cost of Rs. 3,200 partly contributed and partly raised from the Śvetāmbara Jains of Calcutta by Mr. Puran Chand Nahar, M.A., B.L., and these have now been exhibited in Bay No. 20 of the same gallery. In addition to these casts a representative group of 20 original sculptures was also acquired at Mathura during the year for the Indian Museum by the Director General of Archæology through Rai Bahadur Pandit Radhakrishna, Honorary Curator of the Museum of that place. All these specimens have been displayed in Bays Nos. 1 and 2 of the Gupta Gallery. A brief note on the art represented by these sculptures will be found elsewhere in this report (*vide* page 164).

" The Indian Museum has also received a few later mediæval sculptures from Mathura. In most cases the material used is grey sandstone, though sculptures of red sandstone are not rare. In Plate XL *a* and *b* are reproduced two Jain bas-reliefs. With the former may be compared Plate XL *f* a Buddhist sculpture from Sarnath (3′ 7½″ × 1′ 9½″). But the most remarkable piece (1′ 4″ × 1′ 2½″) in this group is represented by figure 18. In this bas-relief is represented in a niche between two pilasters a four-armed figure seated on a lotus. The face, the lower hands, and the feet are damaged. The right upper hand holds a *sruva* (wooden laddle for pouring clarified melted butter), an attribute of Brahmā, and the left upper hand holds a bunch of grass or a lotus. The legs are locked in the *yogāsana* (the posture of performing *Yoga*) and the lower hands are placed on each other on the lap in the pose of *dhyāna* or meditation. Evidently it is an image of Brahmā. Brahmā is thus described in the *Agnipurāṇa* (Bib. Ind.) Chapter 49, 14—15:—

chatur-mukhas-chatur-vāhur-brihaj-ja-ṭharamaṇḍalaḥ lambakurcho jaṭāyukto Brahmā haṁsāgravāhanaḥ II. dakshiṇe ch-ākshasutraṁ-cha sruvo vāme tu Kuṇḍikā ājyasthālī Sarasvatī Sāvitrī vāmadakshiṇe II.

" 'Brahmā is four-faced, four-armed, pot-bellied, long-bearded and has matted hair and the best of swans for his carrier. In his right (hands) he holds a rosary of *aksha* (eleocarpus) seeds and the *sruva*; in his left (hands) a water-pot, and a pot containing melted butter. (He has) Sarasvatī on his left and Sāvitrī on his right.'

Matsyapurāṇa, (Poona, Ānandāśrama Series, No. 5) Chapter 360, 40—44:—

Brahmā kamaṇḍaludharaṁ kartavyaḥ sa chatur-mukhaḥ I
haṁsārūḍhaḥ kvachit-kāryaḥ kvachit cha Kamal āsanaḥ II
varnataḥ padmagarbhābhaś-chatur-bāhuḥ śubhekshaṇaḥ II

kamaṇḍaluṁ vāmakare sruvam haste tu dakshiṇe II
vāme daṇḍadharaṁ tad-vatsruvaṁ ch-āpi pradarśayet I
Munibhir-Deva-Gandharvaiḥ stuyamānaṁ samantataḥ II
kurvānam-iva lokaṁ-striñ-chhuklāmbaradharaṁ vibhuṁ I
mṛigacharmadharaṁ ch-āpi divyayajñopavītinam II
ājyasthālīṁ nyaset pārśve Vedāṁ cha chatuṛaḥ punaḥ I
vāmapārśve hasyā Sāvitrīṁ dakshiṇe cha Sarasvatīm II

" 'Brahmā should be fashioned as four-faced, and holding a kamaṇḍalu (water vessel); sometimes he is to be made as riding on a swan, sometimes seated on a lotus; like the interior of the lotus in colour; four-armed; casting auspicious glances; the kamaṇḍalu is in the left hand and the *sruva* in the right: in the left hands a staff and also a *sruva* may be shown; (he is) praised from all sides by sages, gods and Gandharvas; (engaged in) creating the three worlds; clad in white, omnipresent; or clad in deer skin, wearing a heavenly sacrificial thread. A pot containing melted butter and the four Vedas should be placed on one side; on his left side Sāvitrī (should be represented) and Sarasvatī on the right.'

" Hemādri, who wrote in the last decade of the 13th century, in his *Vratakhaṇḍa*, Chapter I (Bib. Ind., Volume I, page 103) quotes the following description of Brahmā from the Vishṇudhar mottara :—

Brahmāṇaṁkārayed-vidvān Devaṁ-saumyaṁ chaturbhūjam I
baddhapadmāsanaṁ tushṭaṁ tathā kṛishṇājināmbaram II
jaṭādharaṁ chaturbāhuṁ saptahaṁsarathasthitam I
vāme nyast-etarakaraṁ tasyaikaṁ doryugaṁ bhavet II
etasmin dakshiṇe pāṇāvaksha-mālā tathā śubhā I
kamaṇḍaluṁ dvitīya cha sarvābharaṇadhāriṇam II
sarvalakshaṇayuktāsyaṁ śāntirūpasya pārthiva I
padmapatradalāgrābhaṁ dhyānasammiḥtekshaṇam II

" 'The skilful artist (*vidvān*) should make the god Brahmā calm in expression, four-armed; seated with the legs locked in each other, contented, clad in black deer skin, having matted hair, riding on a chariot drawn by seven geese, with (the lower) right hand placed on the left and thus the opposite fore-arms united, holding a rosary of *aksha* in the other right hand and a water vessel in the second (*i.e.*, left) hand, wearing all kinds of ornaments, with face marked with all auspicious signs, an embodiment of peace, like the border of the lotus petals in colour, and with eyes closed in meditation.'

" This is but a free translation of the extract from the Vishṇudharmottara. The term *chaturbhujam* (four-armed) in the first line should pobably be read as *chaturmukhaṁ* 'four-faced', for the four arms (*chaturbāhu*) of Brahmā are again mentioned in line 3. For other texts containing descriptions of the image of Brahmā the reader is referred to T. A. Gopinath Rao's Elements of Hindu Iconography (Volume II, Part II, Madras, 1916, pages 243-246). This image which we venture to identity as Brahmā differs from all the authorities in one particular; it is not four-faced, it has only one face. But its four arms, one of which holds a *sruva*, a constant attribute of Brahmā, renders its identification with any other divinity impossible. The symbolic character of the images worshipped by the Indian sectaries left the sculptors a good deal of freedom. Gopalabhatta, the compiler of the *Haribhaktivilāsa*, who flourished in the 16th century A. D., quotes this stanza from an unnamed text (*Haribhaktivilāsa*, Chapter 18):—

bhaktyaiva Bhagavanmūrti-prādurbhāvohpi ched-bhavet
kartavyohathāpyupāyohatra pūrvaiḥ sadbhi pradarḥśitaḥ

"'Though it is the *Bhakti* or devotion (of the devotee) that causes the manifestation of the image of the Bhagvat, in this matter the procedure of the ancient sages should be followed.'

Indian Museum, Calcutta.

"As is evident from this and other similar texts the image of an Indian divinity is not an objective reality, but has only subjective existence. So the worshipper is free to conceive his object of worship in his own way. But tradition handed down by ancient sages held him in check. Still, tradition could not always stifle the creative instinct of the image-maker. Hence the multiplication of varieties in images of the same deity.

"The Darbar of the Maihar State presented through the Director General of Archæology in India 8 pieces of later mediæval Brahmanic sculptures. All these belong to the Western School and are of very inferior workmanship. One of them is an image of Vishnu sleeping upon the Naga Sesha also called Ananta. According to the Vishnu-purana (Book VI, Chapter 4) Vishnu as creator enjoys this mystic slumber at the time of the dissolution of the universe. Though the piece is mutilated it deserves notice as the only specimen of the type in the collection of the Indian Museum. Another sculpture in the collection. an image of Vishnu seated on a plain throne with the right leg hanging down (1′ 10″ × 1′ 4″), is represented in Pl. XL, fig. c.



FIGURE 1. SIVA NATARAJA PRESENTED BY SIR HENRY SHARP TO THE INDIAN MUSEUM ARCHÆOLOGICAL SECTION.

"A valuable addition to the small group of South Indian sculptures made during the year is an image of Nataraja (fig. 1) presented by Sir Henry Sharp, C.I.E., late Secretary to the Department of Education and Health, Government of India. It is a four-armed image of the dancing Siva of the type made famous by the writings of Havell, Coomaraswamy and Rodin. Sanskrit and Tamil texts relating to Siva's dance have been discussed by Coomaraswamy and Gopinath Rao.* To these texts may be added the account of Siva's dance in the *Kūrmapurāna*, Part II (*Uttaravibhāga* Chapter 1—5).† Once upon a time the sages Sanaka, Sanatkumar and others performed severe austerities at the hermitage of Vadarikā in the Himalayas, there saw the divine Nara-Narayana, and asked these questions, 'Whence comes this universe? What is soul? What is salvation? What is *Īsvara* (Lord)?

* Gopinath Rao, *Elements of Hindu Iconography*, Vol. II, Pt. I, Madras, 1916, pp. 223—270.
† *The Kūrmapurāna*, Bibliotheca Indica, pp. 446—477.

What is the supreme Brahman?, etc., Nara-Narayana then assumed the form of Vishnu and Siva appeared on the scene. Requested by Vishnu, Siva expounded to the sages the Yoga. After finishing the discourse Siva danced in the sky displaying the highest divine form (*nanarta paramam bhávam-aiśvaram sampradarśayan*). The dance of Siva symbolises the cosmic process (VI-5) and a more graphic representation of the symbol is hardly conceivable.

" Among new miscellaneous antiquities a few deserve special mention. One is a terracotta mould of Mahishamardini found at Peshawar ($7\frac{1}{3}'' \times 5\frac{1}{2}''$) and presented to the Archæological Section by Rai Sahib P. K. Mukherji, Superintendent, office of the Director General of Archæology in India. Plate XL fig. *e* reproduces a plaster cast from this mould. It shows the goddess as having only four arms. In certain respects this image of Mahishamardini differs from images of the goddess found in other parts of India.

"The Director General of Archæology in India has lent for exhibition a small golden image of Vishnu riding on Garuda, with Vishnu's two wives, Lakshmi and Sarasvati on either side. Above the figures are the hoods of seven serpents whose coils serve as the frame. The frame work is oval in shape and measures $2\frac{1}{5}'' \times 2\frac{1}{2}''$ including the hoods of the serpents. Two small rings on the back indicate that the object was intended to be used as a pendant. The Lingaits of Southern India use small phallic emblems of Siva in the same fashion.

" A few Bengali and Persian documents of considerable historical value have been added to the collection during the year. Three of these relate to the history of Bengal in the reign of Aurangzeb. The first is a deed of sale of landed property (*tāluk*) dated in the Bengali year 1073, 1st Paush (16th December, A. D. 1666). It is written in Bengali, and in place of the modern Bengali form *āmi*, *āmār*, *tumi*, *tomār* occur *āmhi*, *āmhār*, *tumhi*, *tumhār*. The second one is a deed of sale recording a certain *chandala's* voluntary sale of himself and his whole family as slaves for the pitiful sum of Rs. 9. It is dated in the Bengali year 1074, 29th Sravan (14th August, A. D. 1667). The language used is corrupt Sanskrit and the script is Bengali. Unfortunately a few letters at the end of every line are lost, but even the damaged text is worth reproducing. The deed reads as follows :—

1. *Samastasupraśastyalaṅkrita sadvirājamāna Mahārājādhirāja Śrimat Sullutāna........*
2. *Bādsāhākapādāravamabhyudayini śubharājye tanniyojita Gauḍamaṇḍalādhipa Na[bāb]*
3. *Srīyuta Sāhistākhāna mahāsayānāmadhikāre tanniyukta Sullutānapratāpa [Dhā]ma[rāi].*
4. *tapākīya jāyagīradāra Śrīyuta Ispindārakhāna mahāśayāśyādhikārê [tanniyu]*
5. *kta Sullutānapratāpa Dhāmrāi tapākīya sikadāra Śrī Nandalāla mahāsayē vi...*
6. *yini ashtāśītyadhika pañchadaśaśata śakārde Sullutāna-pratāpāntargata Dhāma [rāi]*
7. *grāmānta-grata Kāyasthapāḍānivāsi Śrī Gōpīnātha Majumadāra sadasya ne....*

8. *dhā-masthitam tathā vāstavya Śrī Rāmajīva[na] maulika sakāsannavamudrīm*... **Indian Museum, Calcutta.**
9. *tvā Dhāmarāi-saharāntargata-Dēmarānagrāmanivāsi Śrī Gopālanāma chaṇ ḍā[la]*
10. *strīputrakanyā-samētamātmānaṁ ṛiṇādyapahatyā svechchhāy ālikhita vitta-dātri sthā*........ *Miscellaneous antiquities.*
11. *vikrītavāni sana 1074 ta 29 srāvana.*

Abstract.

" 'In the reign of Maharajadhiraja, the glorious *Sullutāna* (Sultan) (Alamgir) *Badasāha*, when, appointed by him, the glorious Sahistakhana (Shayasta Khan) was the ruler of the Gauda country; when, appointed by him, Ispindārkhāna was the *Jāyagiridāra* (fief-holder) of *tāpa* Dhāmrāi in Sullutānaprātapa; when, appointed by him, Sri Nandalāl, Mahāsaya was the *Sikdāra* of *tāpa* Dhāmrāi; in the Saka year 1588, under the superintendence of Gopinath Māzumdār, a resident of Kāyasthapādā in Dhāmrāi, Gopala of Chandāla caste, a resident of Demaran in the town of Dhāmrāi sold himself with his wife and children of his own free will in order to pay off debts, etc., for a sum of nine rupees (or coins) to Rāmājivan Maulik (a resident of Kāyasthapādā at Dhāmrāi) on the 29th Sravan in the year 1074.'

" After the death of Mir Jumlah, Governor of Bengal, in 1663 Shaista Khan was appointed to succeed him. The transaction referred to in the second deed occurred during the first term of Shaista Khan's Governorship of Bengal. Both these documents have been presented by Mr. Kamakhyaprasad Bose, B.L., a resident of Dhamrai in the Dacca District and now in Mayurbhanj State service. A third deed of sale, also presented by Mr. Bose, is dated in the Bengali year 1114 (A. D. 1707).

" The Director General of Archæology in India presented two Persian documents. One of these is a letter of condolence from the Emperor Aurangzeb to Mir Jamal[uddin] whose full name was Safdar Khan Muhammad Jamaluddin. Jamaluddin's father Azam Khan was the Governor [Nazim] of Bengal for a short time. He was dismissed and died at Dacca (Jahangirnagar) in the 21st year of Aurangzeb's reign in A. D. 1677. Azam Khan had two sons, Jamaluddin and Saleh Khan. At the time of Azam Khan's death Saleh Khan was in Orissa and Jamaluddin at Dacca. Prince Muhammad Azam, third son of Aurangzeb, was appointed Governor of Bengal after Azam Khan. In this letter Aurangzeb offers his condolence to Mir Jamaluddin on the death of his father and orders him to proceed to the Imperial court with the dependents and belongings of his father on the arrival of Prince Muhammad Azam and Saleh Khan at Dacca. The letter is dated 29th Rabi II, in the 21st year of the reign of Aurangzeb (Monday, 20th June 1678). On the obverse the letter bears the seal of Aurangzeb dated 1079 H. (= 1668 A. D.), and on the reverse an endorsement in the name of Prince Muhammad Mauzzam Shah Alam, second son of Aurangzeb, and his seal dated 1087 H. (=1676 A. D.).

" The second Persian document is a *Farmān* of Alamgir II dated in the 1st year of his reign (A. D. 1754) and records the annual grant in perpetuity of 3590 *dams* from Parganah Zharsah in the Shahjahanabad (Delhi) Province to one Lal Muhammad Khan on the death of Muhammad Naki Khan and others. The seal of Alamgir II is dated 1167 H. (=A. D. 1754).

Indian Museum, Calcutta. *Coin Cabinet.*

"A collection of 222 (199 silver and 23 copper) coins of the Muhammadan dynasties has been added to the cabinet during the year. With the exception of 106 coins presented by Mr. R. D. Banerji, Superintendent, Archæological Survey of India, Western Circle, the others are all Treasure Trove coins presented by the Governments of Bengal, the United Provinces, and the Punjab, the Director of Industries, Central Provinces, and the Bombay Branch of the Royal Asiatic Society. All the Treasure Trove coins are Mughal coins with the exception of 54 silver of the independent Sultans of Bengal presented by the Government of Bengal, one of which, that of Alauddin Firuz Shah, son of Bayazid Shah, dated 817 H. (A. D. 1414) of Satgaon mint, is unique. The collection presented by Mr. R. D. Banerji is remarkable for variety. It includes 70 coins of the Durrani kings, a few coins of the Shahs of Persia, some coins of the Sultans of Delhi, Malwa and Jaunpur; one coin of a Bahmani Sultan, and 20 coins of the Mughal Emperors."

Delhi Museum. Mr. Blakiston reports that:—

"With effect from the 1st April 1922 the charge of the Delhi Museum of Archæology was transferred from the Delhi Administration to the Archæological Department. Twelve new exhibits and 235 coins, as detailed in Appendix were received in the Museum. One of the exhibits, *viz.*, a specimen of calligraphy written by Prince Humayun, a cousin of the Emperor Akbar Shah II, deserves special notice. It consists of a congratulatory verse presented to the Emperor on the occasion of the rejoicings held in honour of the recovery of the latter from illness. The new picture cases numbering thirteen in all, alluded to in last year's report, have now been erected, and a start has been made towards arranging in them the pictures which are to be provided with descriptive labels printed in gilt. Six standard cases have also been constructed from designs by the Superintendent under his supervision and have been placed in the Museum for the display of miscellaneous exhibits, and some of the old cases have been removed."

Taj Museum, Agra.

"To the collection of the Taj Museum, Agra, the only additions made this year were two photographs of the Taj Mahal presented by the Right Honourable the Marquis Curzon of Kedleston, and one old China bowl, purchased."

Peshawar Museum.

Though the Peshawar Museum is, strictly speaking, a Provincial institution, its collections are almost entirely the property of the Imperial Government and as the Superintendent, Archæological Survey, Frontier Circle, acts *ex-officio* as Honorary Curator, and no small portion of his time is expended in its administration, the annual statement is, therefore, included in this review. Mr. Hargreaves reports as follows:—

"The Peshawar Museum, despite its purely archæological interest, still maintains its popularity, the total number of visitors reaching 55,058.

"The acquisitions, during the year, numbered six hundred and thirty-nine, five hundred and eighty-two being coins, the remainder, without exception being antiquities recovered in the recent operations at Jamalgarhi and transferred on loan to the Museum by the Superintendent, Archæological Survey, Frontier Circle. Of these coins, 532

were purchased, 451 being the hoard of copper coins dealt with on page 159 below. Seven coins were obtained from the collection of Dr. Taylor, and 74 locally, being principally Mughal and Barakzai pieces. Among the local purchases was a rare coin of Jahangir concerning which Major Whittell has been good enough to furnish the following note :— Peshawar Museum.

"I have to record the acquisition by the Peshawar Museum, by purchase in Peshawar City, of a half rupee of the Mughal Emperor Jahangir minted at Kabul in the first year of his reign and bearing his pre-accession name of Salim. The couplet on the coin is as follows :—

'May the currency of the coin of Kabul in the name of Shah Salim continue for ever from the abode of the servants of the Living (God), the ancient of days.'

"One other specimen only of this coin appears to be known; it was described by Rodgers in *Rare Mughal Coins* in the *J. A. S. B. 1896* and is catalogued in the *Catalogue of the coins in the Indian Museum, Calcutta* (Nelson Wright, No. 686).

"The specimen acquired by the Peshawar Museum is in excellent condition and is better centred than the other known example.

"Fifty coins were presented, namely, 7 billon coins of Sabaktagin by G. Cunningham, Esquire, O.B.E., I.C.S., Political Agent, Tochi, being part of the hoard mentioned on page 159 below, one copper coin of Malik Ambar by the Government of the Central Provinces, 10 silver coins of the Bengal Sultans by the Government of Bengal, 9 silver Mughal coins by the Government of the United Provinces, 5 silver Mughal coins by the Punjab Government and one gold *padma tanka*, 8 silver and 5 copper Mughal coins and 4 copper coins of the Gujarat Kings by the Bombay Branch of the Royal Asiatic Society.

"Thirty-two books and reports were added to the Museum Library, the purchased volumes dealing exclusively with the history, numismatics, antiquities and inscriptions of India and adjacent regions.

"More than a hundred metal antiquities which had been recovered at various times by excavation on the Frontier, and which required skilled attention were sent to the Archæological Chemist for necessary treatment. These have now been received in excellent condition and have been replaced in their original show cases.

"Necessary repairs to the Museum fabric have been carried out, but nothing has yet been done to improve the grounds. An effort has been made to maintain the lime hedge and some flower-beds were planted in front of the building, but these merely serve to emphasise the surrounding desolation.

"Since 1906 photographs of 813 Museum antiquities have been prepared by the Superintendent, Archæological Survey, Frontier Circle, in whose office the negatives are preserved. To facilitate reference to these negatives the Custodian has prepared a list

Peshawar Museum.

giving the negative number, size, description, Museum number of the antiquity, and the case number, and an endeavour will be made to have an album of prints prepared from these negatives for the convenience of visitors desirous of purchasing prints.

"The revision of the Handbook to the Sculptures in the Peshawar Museum referred to in last year's report has been started, but the Honorary Curator has been so frequently absent from headquarters that but little progress has been made with the text. The new blocks for the plates have, however, been prepared and every effort will be made to complete the revision but the Honorary Curator's additional charge of the Muhammadan and British Monuments of the Punjab will, it is feared, render any prolonged stay at Peshawar improbable in the immediate future.

"Very few of the large images in the lower gallery have their bases or pedestals intact and to make them stand upright against the wall the irregularities have, hitherto, been corrected by stone wedges. In cleaning operations these have, on several occasions, slipped, resulting in damage to the sculptures and sometimes to adjoining cases. For the adequate and safe display of these images something more appropriate was felt to be necessary and the method adopted at the Taxila Museum has been followed and 21 images have been provided with neat but substantial *shisham* pedestals, which not only give them stability but add considerably to their appearance. Arrangements are being made to supply the remaining images with similar stands.

"In last year's report it was stated that Major H. M. Whittell, O.B.E., I.A.S.C., hoped to be able to survey the coin collection, select those worth retention and draw up a manuscript catalogue. As he was fortunately retained on the Frontier he has succeeded in preparing, in manuscript, a catalogue of the following Museum coins; Greek King of Bactria, Kings of Ghazni, Pathan Kings of Delhi, and the coins of Akbar and Jahangir. Under Major Whittell's direction the Custodian purchased a number of coins in the Peshawar bazar, including a number of Barakzai pieces of which the Museum had hitherto possessed but few specimens.

"It was noted last year that sixty-six sculptures belonging to the Government of India and including several formerly exhibited in the Peshawar Museum had been transferred on loan to the Indian Museum, Calcutta, and that five large images still remained to be despatched. These were likewise transferred during the year. In February 1923 forty-two additional antiquities, including two of the Peshawar Museum collection, and comprising stucco figures and heads, reliefs and images were similarly transferred on loan to the Patna Museum.

"In addition to all Sundays the Museum was closed to the public for twenty-four days, the Hall being required for various public purposes, conferences, meetings and departmental examinations.

"The conduct of visitors has been exemplary. The members of the staff of the Museum have performed their duties satisfactorily and the Custodian, M. Dilawar Khan, has continued to display a very real interest in the collections and has performed his important duties with fidelity, intelligence and zeal."

Rai Bahadur Daya Ram Sahni, as Honorary Curator of the Museum at Sarnath, reports that:— **Sarnath Museum.**

"With effect from the 1st June 1922 the maintenance of the Archæological Museum at Sarnath has been transferred to the charge of the Superintendent, Archæological Survey, Hindu and Buddhist Monuments, Northern Circle as *ex-officio* Curator, who now exercises in regard to the Museum all the powers formerly exercised by the Commissioner of the Benares Division. From the same date the Curator of the Provincial Museum, Lucknow, ceased to be Honorary Curator of the Sarnath Museum. During its existence of about 14 years, this institution has yearly gained in popularity and has been inspected by visitors from all parts of the world. In the absence of a turnstile it is difficult to estimate the annual number of visitors but it is judged that it is never less than 50 to 60 thousand. The highest attendance is in the month of Sravan, when the greater part of the population of Benares and the neighbouring villages pay their homage to the Mahadeva temple at Sarnath incidentally visiting the Archæological remains. Among distinguished visitors may be mentioned His Excellency Sir William Marris, Governor of the United Provinces, and their Highnesses the Prince and Princess Bidya of Siam who were taken round by the *ex-officio* Curator under orders of the Government of India. Some 500 American tourists also visited the Museum.

"The Museum galleries present a crowded appearance owing to the addition of numerous sculptures brought to light by recent excavations. This congestion can only be relieved by taking out surplus exhibits and arranging them in a suitable godown outside the Museum proper. A proposal to provide an extra room behind the Museum is being submitted to the Director General of Archæology in India. It will then be possible to re-arrange the sculptures in the galleries with suitable spaces between them. Some two hundred new explanatory labels have been printed and will be affixed to the more important antiquities.

"The Sarnath collections afford remarkable opportunities for the study of Gupta and earlier Art and Architecture, and are frequently used for such purposes by scholars from Benares and Bengal. The need of a small library of books dealing with the antiquities of Sarnath and allied subjects is keenly felt. As a first step towards meeting this demand the Superintendent recommends the inclusion of this institution in the Free Distribution List of the Department for the free supply of its future publications.

"The garden attached to the Museum has been laid out in accordance with designs prepared by Sir John Marshall in 1912. A few years ago the original beds containing biotas and flowering plants were removed and new beds made by the Superintendent, Government Gardens, Fyzabad, who was appointed to look after this garden by the United Provinces Government. The new beds proved quite unsatisfactory, and under the orders of the Director General of Archæology they have now been eliminated and grassed over, and the old ones have again been restored and replanted with biotas and rose plants obtained from the Taj Garden at Agra. The lawns also suffered from insufficiency of water supply as some of the underground earthen pipes which irrigated the lawns had become worn and leaked at several places with the result that most of the water was absorbed into the soil and never reached the surface. The whole of the pipe line has now been dug out and repaired with new earthen pipes wherever necessary. Portions of the Museum compound on the north and east sides have also been grassed

Sarnath Museum.

over with clean turf, and new approaches provided along the Museum walls on both those sides. An estimate amounting to Rs. 1,476 for the construction of a surface drain along the north side of the compound has been sanctioned. This drain will be constructed as soon as funds are available.

"The last seventy-three copies of the Catalogue of the Sarnath Museum were sold to the public during the year and the sale-proceeds amounting to Rs. 273-12-0 credited into the Benares Treasury. Arrangements are being made for reprinting a revised edition of the Catalogue and printed copies of the 3rd edition of the Guide which is also out of print, will be ready before the commencement of the next cold weather. The total expenditure on the maintenance of the Museum during the year amounted to Rs. 2,418-12-0."

Nalanda Museum.

Mr. Page writes:—

"The only Museum in the Central Circle maintained from Imperial Funds by the Archæological Department is that at Nalanda, where a small collection of the finds recovered from the site in the course of excavation is housed temporarily in one wing of the Archæological Rest House.

"The collection comprises a considerable number of small images, both in metal and stone, of the Buddhist hierarchy. Among them are two very fine stone sculptures of the Buddha seated in *bhumisparsa-mudra*, and surrounded by scenes depicting the principal events of his life, from the birth in the Lumbini Grove at Rummindei, in the modern Nepalese Terai, to the Nirvana at Kushinagara in the same territory.

"Images of Puranic-Hindu deities, also recovered on the site, are included in the collection; and incidentally afford evidence of the general eclecticism of mediæval India in the matter of religious faith.

"Seals too, some special to the Nalanda monastery, and others of places outside it, are a feature of the collection; which further includes a large number of earthen pots and vases of pleasing shape, ancient locks—identical with the country-made variety of the present day—incense burners, sceptres, and even coats of mail-armour; these last doubtless having some connexion with the sack of the Nalanda monastery at some time during its eventful existence.

"A list of the finds by which this collection was augmented during the year under review is given separately in Appendix D.

"For the better accommodation of these articles, four unit wall-cases designed by the Archæological Superintendent were obtained at a cost of Rs. 1,819 during the year; and the construction of the godown and chaukidars' quarters commenced in the previous year was carried to completion at a cost of Rs. 1,649; the total sum expended on the work being Rs. 4,663.

"In February 1922 the Museum collection was visited by Their Excellencies the Governor of Bihar and Orissa and Lady Wheeler; and the Archæological Superintendent who was in attendance, also had the honour of accompanying Their Excellencies over the excavations at the Nalanda site."

The Superintendent, Government Museum, Madras, sends me through Mr. Longhurst the following list of the more noteworthy additions to the epigraphical collection in the Archæological Section of the Madras Museum, although this institution is of course in no way under the Archæological Department. **Madras Museum.**

"(1) A set of four copper-plates having holes to enable them to be strung on a ring, was purchased from Mr. G. Ramdas Pantulu, Headmaster, Board High School, Jeypore. They record that Saktivarman, the Lord of Kalinga, gave the village of Rakaluva to a Brahman named Kumarasarman on the full-moon day in the month of Vaisakha in the 13th year of his reign.

"(2) A set of three copper-plates strung on a ring, the ends of which are secured by means of a seal bearing on the countersunk surface a legend (much worn) of which the last line has been read as *Ra (jo)niavarmasya*, was purchased from Mr. G. Ramdas, Headmaster, Board High School, Jeypore. They record that Umavarman, the Lord of Kalinga, gave the village of Brihatpushta to a Brahman named Haridatta in the 30th year of his reign.

"(3) A set of three copper-plates strung on a ring, the ends of which are secured by means of a small mass of copper on which is impressed the figure of a conch, was purchased from the widow of the late Mr. T. G. Gopinatha Rao. They record that the Lord of Chikura gave the village of Pulaka to a Brahman named Harisarman in the 6th year of his reign.

"(4) A set of copper-plates strung on a ring, the ends of which are secured by means of a seal which bears in relief the emblems of a boar, a chauri and some indistinct emblems, was purchased from Boyapati Bulleyya, Singarajupalem, Kistna District. It records that the Eastern Chalukyan King Raja Raja II, son of Kullottanga Chola I, gave twelve villages to his close friend and subordinate Mammadi Bhima as a governorship in respect of 1,000 villages comprising the Vengipuravishaya. The gift was made on the 27th July 1076 A. D. These plates give the date of the coronation of the king.

"(5) A set of three big copper-plates was presented by Mr. Hari Rao of Kumbakonam. They record that Vijiaraghava, one of the Nayak Kings of Tanjore, gave the village of Alamelumangapuram as *agrahara* to Vaishanaya Brahmans who were well versed in the Vedas. It is dated *Mina Paurnima* in the year *Manmatha, saka* 1578 (A. D. 1656).

"(6) A small copper-plate in Oriya characters was purchased locally. It records the grant of a plot of land to a Brahman by Ramachandra, King of Nandapura.

"(7) A set of five copper-plates strung on a ring, the ends of which are secured by means of a seal bearing the surface the legend *Tyagadhenu* between a crescent and a lotus, was purchased from P. Subramania Sastri, National College, Masulipatam. They record that the Eastern Chalukyan King, Indravarman, gave the village of Kondanaguru to a Brahman named Chendisarman. The discovery of these plates has proved beyond doubt that this King, Indravarman, did actually rule, a point not definitely settled before."

Rajshahi Museum. The following notes on non-departmental museums in Eastern India are contributed by Mr. K. N. Dikshit :—

" The Director, Varendra Research Society, reports that three stone images were added to the Society's collection this year. One of these is a rare image of Kartikeya from Mahatore in Dinajpur District, which discloses fine artistic execution. Another is a Chamunda image from the same locality. Among six terracotta objects acquired for the Museum, two carved tiles bearing the figures of dwarfs from Biharail in the Rajshahi District deserve particular mention. The numismatic collection of the Society has been enriched by the addition of 113 coins, almost all of the Pathan, Bahmani, Gujerat, Malwa, Adilshahi, Nizamshahi, Durani, Mysore and Mughal dynasties.

Dacca Museum. " The most notable addition to the Archæological Section of the Dacca Museum during the year is a monolithic granite pillar obtained from the ruins of an ancient temple at Sonarang in Vikrampur, District Dacca. The monolith is one of the biggest ever discovered in East Bengal and must have belonged to the *mandapa* in front of the temple of which the plinth was discovered in course of the excavation and removal of the pillar. The pillar is 17 feet 4 inches in length and 24 inches square at the base, while it tapers towards the end. The shaft is octagonal in the middle with a square section at the top and bottom decorated by rectangular and triangular arabesque mouldings. The pillar is about 150 maunds in weight and it was with great difficulty that it was removed to the precincts of the Museum.

" The numismatic section of the Museum, which is strong in the issues of the Independent Sultans of Bengal, was further amplified by the acquisition of 149 coins of the same series, of which 103 were received as presents from the Government of Bengal and the rest purchased from the Dacca Collectorate. A descriptive illustrated catalogue of images in the Museum collection, with which are incorporated notices of all the more important images in Eastern Bengal, is in press.

Gauhati. " The Secretary, Assam Research Society at Gauhati, reports that two stone inscriptions have been added to the Society's collection, one of which was recently found in the midst of jungle at Boko in Kamrup District and is probably written in Ahom characters. An inscribed stone pillar from Sadiya with Ahom inscription has also been removed to the Society. Two metal images of Vishnu were also obtained, one of which is a fine image with attendant figures of Lakshmi and Sarasvati found in the ruins of an ancient temple named *Raidongia Dol* near Dibrugarh. Some of the old pieces of Ahom cannon lying in the compound of the Civil Surgeon were made over to the Society. The collection of coins now numbers 82 of which 79 are silver coins of the Ahom kings of Assam."

SECTION V.

Officers on Special Duty.

Sir Aurel Stein sends me the following note on the work done by himself and Mr. Andrews during 1922-23. **Sir Aurel Stein's work.**

"As recorded in the Report on my labours in the preceding year, the tasks connected with the elaboration of the scientific results of my second Central-Asian expedition had been brought to a successful conclusion by the publication of the two large works *Serindia* and *The Thousand Buddhas* at the close of 1921 and in the spring of 1922, respectively. It thus became possible for me during the year 1922-23 to concentrate my efforts mainly upon the preparation of the Detailed Report on my third Central-Asian expedition, 1913-16. Work on this very extensive task had been started in the summer of 1919, but was subsequently stopped by the protracted and heavy labours which the publication of the two above-named works entailed, during the years 1920 and 1921. It was impeded also by the equally exacting labours which down to 1922 I had to devote to the preparation of the atlas of maps comprising all the surveys of my three journeys in Chinese Turkestan and Kan-su and to that of the *Memoir* dealing with this cartographical record.

"During the spring and summer of 1922 a good deal of my time was still claimed by the successive stages of revision which the last of these 47 map sheets, on the scale of 1,500,000, prepared at the Trigonometrical Survey Office, Dehra Dun, needed, and by the passing through its press of the detailed *Memoir* on these maps, filling with its various Appendices 208 pages foolscap print and forming Volume XVII of the *Records of the Survey of India*. The selection of suitable illustrations for this volume out of the thousands of photographs brought back from my three journeys and their reproduction with the needful explanations, etc., also cost an appreciable amount of time during the rest of the year. The publication of the volume has suffered delay over the reproduction at Calcutta of the numerous plates containing these illustrations, but may now be shortly expected.

"During the first half of the year under report the work of cataloguing and systematically describing the thousands of antiquities brought to light in the course of my third expedition, and temporarily deposited at Srinagar, was concluded through the joint efforts of Mr. F. H. Andrews, late Principal of the A. S. Technical Institute, Srinagar, and Miss F. Lorimer, my second assistant. Mr. Andrews, whose devoted and experienced collaboration in all matters involving artistic and technical knowledge had been of the greatest value to me for the study of the multifarious archæological remains contained in my successive Central Asian collections, completed his final revision of the Descriptive List of antiques, to be published in my Detailed Report, before relinquishing his Srinagar appointment at the end of November 1922. Miss Lorimer who, aided by the prolonged experience she had gained by her work on my second collection at the British Museum, had been able to render very valuable help in this big task, returned to England at the beginning of the same month on completion of her term of appointment.

"Notwithstanding the detailed information on all antiques recorded in the Descriptive List, frequent need arises for direct reference by myself to particular antiques as the writing of my Detailed Report progresses. In order to provide for the

Sir Aurel Stein's work.

assistance required in this and similar tasks, and also for the systematic safeguarding of the contents of the collection, while it remains at Srinagar, Miss H. L. E. Burgess has been employed as temporary assistant since Miss Lorimer's departure.

" Among the minor tasks which claimed Mr. Andrews' and my own joint attention before his departure for Delhi was the preparation of a detailed plan for such an extension of the present collection building at the New Delhi Museum site as will permit the Indian share of the antiques from my second collection, as well as all antiquities comprised in the third collection (apart from the wall paintings already provided for by the existing building), to be exhibited with adequate safeguards for their preservation. This additional accommodation had been contemplated already at the time when the present building was erected. Its provision, as soon as financial considerations permit, is highly desirable. It will be impossible without it either to render the manifold contents of the collections, possessed of artistic and similar general interest, accessible to the public or even to assure their safe preservation from climatic and other risks.

" Mr. Andrews' temporary employment for the work of setting up the ancient Buddhist wall paintings of my third collection at the New Delhi Museum building was sanctioned in 1922 by His Majesty's Secretary of State for a period of five months. Accordingly, Mr. Andrews after leaving Kashmir was able to carry on this work to which he could previously attend only during brief periods of winter vacations, continuously till the close of April. The report furnished below by his own pen shows the amount of steady progress he was able to accomplish in this important task. It is equally satisfactory to record that through a special grant provided by the Director General of Archæology it became possible to have glazed wall cases constructed on Mr. Andrews' designs and under his direct supervision, for two out of three large rooms of the existing depository building. These will allow the greater portion of the ancient frescoes recovered and set up with so much care to be exhibited with adequate safeguards for their future preservation.

" In this connection it may be mentioned that during the stay which a month's absence from Srinagar in February enabled me to make at New Delhi, Mr. Andrews and myself prepared the detailed scheme according to which all the frescoes from both my second and third collections will find their final and most suitable display on the walls of the existing building.

" For the rest of the year I devoted all available time and energy to work on the Detailed Report of my third expedition. The task of writing it is rendered somewhat more difficult by the fact that it has not been preceded by the publication of a personal narrative, recording geographical and other observations of a more general character, such as my *Sand-buried Ruins of Khotan* and *Desert Cathay* had provided in the case of my first two journeys.

" The magnitude of the task involved may be judged from the fact that the explorations carried out on this journey extended over two years and eight months, and that the aggregate of the marching distances covered between the Pacific watershed on the east and the Pamirs and Seistan in the west amounted to nearly 11,000 miles. Nevertheless the recording of these explorations and of their results proceeded sufficiently far during the year under report to justify the hope that it will be completed in a form fit for printing before the close of the official year 1923-24.

Sir Aurel Stein's work.

" The clean drawing of the very numerous plans, etc., needed to illustrate excavations, etc., has progressed *pari passu,* and is now nearly finished. But the preparation of plates with reproductions of all notable antiquities is a task which must be left for future arrangements after the text is completed."

Mr. Andrews' work.

Mr. Andrews writes from England on his work at New Delhi as follows: " Work on the backing and mounting of the ancient Buddhist wall paintings brought from ruined shrines in the Turfan District of Chinese Turkestan by Sir Aurel Stein, K.C.I.E., in the course of his Third Central Asian Expedition (1913-1916) was resumed in December 1922 and was continued until April 1923.

" The character of the paintings was briefly indicated in my last report, in which was also described the method employed by Sir Aurel Stein for removing them from the original walls and packing them for transportation to India.

" The procedure adopted by me for backing and mounting the paintings, also described in my previous report, was continued during the period under review. As assistants I secured two students from Mr. Lionel Heath, Principal of the Mayo School of Art, Lahore, and two from Mr. Nat Heard, Principal of the Government School of Arts and Crafts, Lucknow. One of the Lahore students fell sick almost at once and had to return home. The other three worked well after they had learned the processes. Two local black-smiths were employed to prepare the aluminium frames which form the support for the pictures, and they worked quite intelligently towards the end of the period. The clerk (Babu Prem Narayan) was very helpful in all directions, whether at clerical work, or the various phases of the picture mounting and hanging.

" Many of the paintings dealt with this season were of a particularly friable nature and had suffered rather badly in transit in spite of the excellent packing. The rearranging of shattered fragments proved a long and rather trying task, but the result in the end was satisfactory.

" The number of slabs made up into sections mounted on aluminium frames was 77 of which some were probably in hand from the previous year, but at the time of writing I have not access to the records to verify this. The number of sections mounted was 32. The number of slabs cleaned and backed with plaster of Paris ready for mounting on aluminium was 33 done in the present season *plus* 18 remaining over from 1921-22, making 51 in all, lying ready to be dealt with in the season of 1923-24. I am unable to calculate the superficial area at the moment, but it is probably approximately 150 square feet.

" The fitting of plate glass casing over the walls to be occupied by the paintings was commenced this season, under the direction of the Wood Working Section of the Public Works Department at Raisina, and considerable progress has been made with the central gallery. For the convenience of the carpenters and the safety of the paintings it was found necessary to remove the whole of the paintings from the gallery in hand to the two end galleries. Although this absorbed a good deal of time it was unavoidable.

" Under the orders of the Chief Engineer measures were taken to ensure that the roof of the three exhibition galleries should be watertight. The roof had been giving a great deal of trouble, and the steps now taken were very urgently needed and will, it is hoped, prove effectual. Also during the year the outer N. wall was stripped of its plaster and was cemented because of the signs of damp having appeared on the inner surface against which our paintings will have to be displayed."

SECTION VI.

Archæological Chemist.

Archæological Chemist's work.

The weathering of the Dibesvara temple at Sarapalli, in the Madras Presidency, Mr. Sana Ullah, the Archæological Chemist, attributes to the action of the sea-salts borne by the sea-winds. As the texture of the stone employed in this temple is highly porous, the sea salts can penetrate deep into the surface by capillary action, and accumulate there to do their destructive work. The paraffin paste which was recommended by him for application to this monument is composed of: paraffin-wax, 1 lb.; petrol, 1 gal.; spirit of turpentine, 1 oz. For other instances of the decay of stone monuments by the action of sea-salts and their *modus operandi*, reference should be made to the recent volumes of these Reports. The weathering of the stone monuments at Sibsagar, Assam, was also reported to Mr. Sana Ullah, and he recommended a preliminary trial with the paraffin paste on these monuments. These as well as previous experiments for the preservation of decaying stone are being watched with keen interest on account of their great importance, but so far the results are encouraging.

Mr. Sana Ullah was deputed to Udayagiri (Gwalior) at the request of the Gwalior Durbar, for the treatment of certain inscriptions and monuments that were weathering badly. The stone of Udayagiri hill is a highly ferruginous sandstone which yields easily to atmospheric action. Apart from the general wearing of the surface the frontages of these caves have suffered badly and in some cases have disappeared completely. In several places thin flakes were peeling off, which were secured by him at the outset, by the injection of casein-lime paste in the cracks while Portland cement mixed with sand was used for filling up bigger cavities. Subsequently the whole surface was impregnated with paraffin paste.

Mr. Ram Singh Ahuja, the Chemical Scholar, who was under training in the laboratory of the Archæological Chemist, was also deputed to the Bagh caves, at the request of the Gwalior Durbar, to carry out certain measures recommended by Mr. Sana Ullah, for the preservation of the frescoes there. Unfortunately, they are situated in a ruined cave temple, which on account of the poor quality of the rock, is beyond conservation. In style and technique these frescoes are very similar to those at Ajanta, but whatever now remains of the beautiful paintings that once adorned this ill-fated temple has been exposed to blasts of wind and rain which have dimmed the colours very much. This year a shed has been provided and the frescoes themselves treated by Mr. Ram Singh Ahuja. He strengthened the loose edges by means of a fillet of a cement, composed of: lime, 50 per cent; plaster of Paris, 20 per cent; Portland cement, 10 per cent; river gravel, 20 per cent, and treated the surface with coats of a solution of beeswax in spirit of turpentine. The volatile spirit evaporates away leaving behind the wax. It is hoped that in this manner the frescoes will be preserved for a long time.

The Archæological Chemist tendered advice also to the Curator, Prince of Wales' Museum, Bombay, and to the Archæological Commissioner, Ceylon, for the preservation of frescoes.

In last year's Report reference was made to the investigation into the subject of Glass in Ancient India, initiated by Mr. Sana Ullah. In this connection, it may be-

mentioned that there are several references to *kācha* (glass) in ancient Sanskrit literature which indicate that glass was known in India in remote antiquity, but nothing is mentioned regarding the technique and skill of Indians in the art of glass-making. Pliny admires their skill in this art but the correctness of this statement has been questioned.* In fact numerous fragments of glass objects of various kinds, bangles, beads, and imitation gems, dating from the 4th century B. C. downward, have been found at ancient sites in Upper India. Three complete conical flasks $5\frac{3}{8}'' \times 3\frac{3}{8}''$, $5\frac{1}{2}'' \times 2\frac{5}{16}''$† and $6'' \times 2\frac{1}{2}''$ of sea-green colour, and a few turquoise-blue tiles $10'' \times 10'' \times 1\frac{1}{2}''$ are in the Museum at Taxila and a wide mouthed pot $2'' \times 2''$ is in the Prince of Wales' Museum, Bombay. These represent probably the biggest intact specimens of ancient glass, yet discovered in India. Mr. Sana Ullah has analysed fifteen more specimens of glass this year and his results have been arranged in the accompanying table. These analyses shew that with the exception of one (XII) which is a potash glass, all are soda glasses. Many of these were free from bubbles and of fine colour. The flasks and the thin curved fragments indicate that these vessels had been formed by blowing. All these facts lead to the inevitable conclusion that Indians were well acquainted not only with the art of glass-making and working, but also with the more advanced arts of decolorising glass by means of manganese oxide and imparting various beautiful colours to it by the addition of metallic oxides, similar to the practice in modern times. Incidently they confirm the statement attributed to Pliny. that Indians were skilled in the art of colouring glass to imitate precious stones.

Archæological Chemist's work.

Antiquities of various kinds received by the Archæological Chemist this year, for cleaning and preservation were 2,040 in number. Noteworthy among them were 5 inscribed copper plates from the Watson Museum, Rajkot; 103 bronze figures from Nalanda; 314 Central Asian coins from Sir Aurel Stein; 304 lead coins from the Government Museum, Madras; and 948 iron objects from Taxila.

The Archæological Chemist trained Babu Adhar Chandra Ghosh, Chemical Assistant, Patna Museum, for five months, and Mr. Ram Singh Ahuja, Chemical Scholar, throughout the year, in the preservation of antiquities by chemical methods.

* *Cf.* Kisa : Das Glas im Altertume, p. 106.

† A. S. R. for 1919-20, Pt. I, plate IX, fig. 3

Table shewing the analyses of specimens of Ancient Indian Glass.

	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	XII.	XIII.	XIV.	XV.
SiO_2 .	39·79	70·57	67·48	68·34	71·01	58·12	53·81	62·61	70·69	85·34	53·25	59·62	61·21	70·74	68·11
Sb_2O_5 .	...	...	2·42	...	...	...	...	...	...	...	...	...	...	...	...
PbO .	38·93	...	...	...	...	...	...	...	...	...	...	...	...	...	...
SnO_2 .	0·22	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Al_2O_3 .	} 2·45	2·46	} 3·64	1·67	3·74	5·74	1·51	2·05	2·88	3·88	6·12	3·42	1·81	6·13	2·22
Fe_2O_3 .		1·60		1·20	1·84	1·74	8·47	1·61	0·81	1·72	9·16	3·21	1·60	1·54	2·27
MnO .	?	0·05	...	0·34	0·05	0·17	0·08	0·06	0·01	...	...	...	...	trace	...
CaO .	2·81	4·60	4·92	8·44	3·73	8·85	6·27	6·95	7·05	2·74	9·18	7·55	8·15	2·11	4·91
MgO .	?	2·68	1·80	1·44	2·32	4·01	4·50	4·17	0·50	2·59	1·47	2·03	3·83	0·26	3·74
Cu .	5·31	...	...	...	...	...	...	...	...	...	9·13	...	...	...	...
CuO .	...	0·55	3·63	...	0·24	...	...	0·57	...	2·53	...	...	0·75	...	0·44
Na_2O .	10·02	14·99	2·48	17·76	14·99	16·74	23·52	17·85	12·86	} 1·20 by difference	11·69 by difference	4·10	18·25	15·80	19·10
K_2O .	0·57	2·65	0·55	0·94	2·65	4·83	2·35	5·04	4·85			19·00	4·98	2·94	...
H_2O .	...	...	14·15	0·43	...	...	...	...	...	...	...	...	...	...	...
TOTAL .	100·10	100·15	101·07	100·56	100·57	100·20	100·51	100·91	99·65	100·00	100·00	98·93	100·58	99·52	100·79

NOTE.—I, thin drawn out strips of Hæmatinum, Taxila ; II, greenish blue glass tiles, Taxila ; III, turquoise-blue powder of decomposed glass object, Taxila ; IV, fragment of light green flask, Taxila ; V, greenish blue glass tile, Taxila ; VI, amethyst glass fragments, Taxila ; VII, brown glass fragments, Taxila ; VIII, light blue glass fragments, Nalanda ; IX, thin curved fragments of light blue colour, Taxila ; X, bluish green bangle, porous and partly decomposed, Krukshetra ; XI, small flat coral-red beads, Assam ; XII, black cylindrical weight (?), 1″×1⅜″, from Udayagiri, C. I. ; XIII, sky-blue glass fragments, Nalanda ; XIV, green glass rectangular object, Nalanda ; XV, blue bangle, Taxila.

SECTION VII.

Treasure Trove.

Delhi.

" The only find of Treasure Trove reported in this Circle " writes Mr. Blakiston, " was a copper vessel containing 106 billon coins, which was discovered during the excavation of block 159 (Firozabad village) of the new capital city of Delhi on the 1st of September 1922, and the find was transmitted to the Delhi Museum of Archæology by the Deputy Commissioner, Delhi. The hoard consisted of 98 coins of Bahlol Lodi, one of Sikandar Lodi and seven of Husain Shah of Bengal. Out of these, 55 coins have been retained in the Delhi Museum of Archæology, and the rest are being distributed to the various museums on the distribution list of the Government of India.'

Punjab.

Rai Bahadur Daya Ram Sahni reports that three finds of old coins were dealt with in the Punjab. Regarding them he says: "They consisted of fifty-three silver coins found at Kot Moman, District Shahpur, seventeen silver coins found at Multan, and one hundred and seven silver coins found at Domel in the Attock District. Out of the first two lots 47 and 14 coins respectively were acquired by Government. All of them belong to known mints of the Mughal kings and have been distributed to the various museums in the country. The coins found at Domel are still under examination."

North-West Frontier Province.

It was stated in last year's report that the Director of Public Instruction, North-West Frontier Province, had expressed his readiness to assist in making known through his department the provisions of the Treasure Trove Act. He has since then issued a note which Mr. Hargreaves had drawn up on Treasure Trove. The Director was also furnished with an Urdu translation of the note for the information of teachers in village schools where ignorance of the Treasure Trove Act is likely to be greatest. Mr. Hargreaves reports, however, that " No finds coming under the operations of the Act have been reported, but antiquities recently recovered have been obtained by purchase, and villagers are certainly beginning to give information about finds and are showing an increasing readiness to treat directly with the Superintendent. The principle finds are detailed below :—

(*a*) The five pieces of sculptures from Kot described on pages 97-98.

(*b*) Seven coins of Sabaktagin, being part of a hoard of several hundred coins found in a jar by coolies about half a mile south-east of Tal on the Tochi river. The finders at once fell upon the hoard and distributed the coins, the only recoverable specimens being presented to the Peshawar Museum by Mr. G. Cunningham, I.C.S., Political Agent, Tochi, to whom I had written on hearing a rumour of the discovery.

(*c*) A more important discovery of coins was reported from Amankot in the Swabi Tahsil, District Peshawar, from which village the beautiful Buddha with crystal *urna*, in the Peshawar Museum was obtained. The finder stated that while sitting on the remains of an ancient wall on the mound Kharah-Bowrai, about a mile west of Amankot, he noticed a small *handi* closed with a lid, sunk in the ground close to the wall. He dug it out

North-West Frontier Province.

and found in the pot, which he broke in the process, a hoard of copper coins. There was nothing else in the vessel, the broken fragments of which he threw away. While busy in collecting the coins another villager came up and told him that he ought to report the find to the Assistant Commissioner at Mardan. Nine days later he did so and the Assistant Commissioner sent the man on with his find to me. The finder was desirous of selling the coins and requested that the matter might be settled without the operations of the Treasure Trove Act. The coins were, therefore, purchased from the finder for the Peshawar Museum as I consider that wherever possible it is well, at least on the Frontier, to avoid involving the finders of treasure in the formalities of the Act, for otherwise they will undoubtedly destroy antiquities or part with them secretly rather than report them to the authorities and have to make journeys to headquarters and be exposed to inconvenience.

"The coins obtained numbered 451, *viz.*, 1 coin of Soter Megas, 44 coins of Vima Kadphises (all of the commonest type) and 406 coins of Kanishka. Of the last 387 are of the commonest type of the Kanishka copper currency and in the two larger sizes. The deities on the reverse are Mao, Mioro, Athasho, Ohsho, Oado, and Nana. Of the remaining nineteen, ten have Helios on the reverse, six Nanaia, and three the Buddha, twice seated and once standing. Those with the seated Buddha are of the type published by Cunningham, *Coins of the Kushans Nos. 8—12, Plate XVIII.*

"The fact that this hoard contains no coins of Huvishka and Vasudeva certainly lends additional strength to the belief that Kanishka Havishka, and Vasudeva did *not* precede the Kadphises group of Kings.* It is true that there is no proof that every coin of the hoard reached Peshawar, and, indeed, the finder himself stated that he had given away six coins in Mardan. The truth of his statement has been verified and by a curious chance one of the six coins came later into my possession. This is a small copper coin of Kanishka. of the type published by Cunningham *loc. cit. No. 16, Plate XVII.* An endeavour will be made to obtain the other five coins, at least for examination.

(*d*) Three very fine stucco heads, bearing traces of red colour recovered at Khalo, one mile from Ghazi, in the Hazara District and detailed on page 99.

(*e*) A bronze image of a standing female, height 4 ⅛ inches, the left hand on the hip, the very long right arm extended towards the ground, the right hand holding an expanded lotus flower. The figure is undraped and behind the shoulders are curved projections which may be intended for wings or flames, or even a crescent such as is seen on the Mao of the Kushan coinage. By the right foot of the figure is a well modelled duck. Behind the head is a pierced projection by which the image could be suspended by a cord, but being fitted with a flat base on which it stands quite firmly this hole seems a superfluity. The owner stated that it had been found at Akhun Dheri 3 miles north-east of Umarzai village, Hashtnagar,

* *J. R. A. S. 1913* "*The date of Kanishka*" pp. 626-659, pp. 911-1042 and the list of coin finds given as a footnote, p. 645.

Peshawar District, where there is a large mound which is subjected to regular digging for soil for the adjacent fields, and whence Buddhist sculptures and Kushan coins have been recovered. A small four-armed Vishnu image of very late Graeco-Buddhist type and almost in the round was obtained from the same place some years ago and is now in the Peshawar Museum. The bronze image, which still awaits identification, was purchased and sent to the Archæological Chemist for treatment and was later transferred on loan to the Peshawar Museum." North-West Frontier Province.

The pigs of lead referred to in last year's Annual Report (page 120) were disposed of during the year. Regarding the examination of Treasure Trove coins in the Presidency, the Honorary Secretary, Bombay Branch of the Royal Asiatic Society, reports as follows:— Bombay.

"There were 4,067 coins with the society at the end of last year, and 1,022 were received during 1922, the details of the latter are :—7 gold coins from Darwar, 355 silver from Kopargaon, 13 silver from Taloda, 15 gold from Nevassa, 500 copper from Erandol, 8 silver from Satara and 48 gold and 76 silver from Bijapur. Out of the total of 5,089 coins 3,495 were distributed or otherwise disposed of under the orders of the Bombay Government and 1,594 are still lying with the Society awaiting examination or distribution."

The coins were examined for the Society by Mr. R. D. Banerji, the Archæological Superintendent of the Western Circle.

Two hundred silver Alam Shahi coins issued by the East India Company were found at Bhagvanpur in the Muzaffarpur District, but on Mr. R. D. Banerji, to whom they were sent for examination, reporting that they were useless for numismatic purposes, they were disposed of under the conditions of the Treasure Trove Act. Bihar and Orissa.

Mr. Page writes respecting several images that have been found: "The Government of Bihar and Orissa reported the discovery of four ancient stone images at Araha, in the Bhagalpur District. The Curator of the Patna Museum, who visited the place at the request of the Archæological Superintendent, reported the images to be Buddhist and of exquisite workmanship and recommended their acquisition for the Patna Museum. In view, however, of the great sanctity attached to the images by the villagers of the locality, it has been decided not to remove the sculptures from the spot, but steps are being taken to secure them against injury. Again, the Government forwarded to the Archæological Superintendent (1) a small broken image on which there appears to be an inscription and (2) a piece of a peculiar stone found at village Bandarjhula in the Kishanganj sub-division of the Purnea District. It is hoped to visit the locality during the cold weather of 1923-24 with a view to ascertaining whether the site of the finds appears to be worth excavating."

No finds of coins are reported in the Eastern Circle, Mr. Dikshit writes, however, that in connection with "the exceptionally interesting find of 341 coins of the Bengal Sultans at Keteen, District Dacca, which was reported last year, a special reward of Bengal.

Bengal. Rs. 325 and certificate in accordance with the recent orders of the Government of India on the subject were granted to the finder Krishna Charan Goai Dass of Keteen, who had found the coins in a brass pot while digging earth in the house of one Mahendra Kumar Goai Dass." Mr. Dikshit writes further: "Three discoveries of stone images have been reported during 1922-23, two from Dacca and one from Jessore, the images in two instances being those of Vishnu. The former was found in April 1922 by an inhabitant of village Gosainbari while re-excavating a tank near his house. It was purchased from the finder by a Hindu of a neighbouring village, who had already begun to worship it, when the local Circle Officer receiving information of the find took possession of it and sent it to the Dacca Museum for safe custody. The image, 3′ 8″ in height, is of black chlorite stone and although its condition is not perfect (the top of the halo background being broken in three parts and there being other minor injuries), it is one of the most beautiful Vishnu images in the Dacca collection. It was eventually acquired by Government and presented to the Dacca Museum. The other Vishnu image was found while excavating earth in a brick field in the vicinity of the town of Jessore. It is of black basalt, 6 feet in height and is in good preservation, except that the hands are lost. Besides the main figure of Vishnu, there are attendant figures of Lakshmi and Sarasvati on either flank, Garuda at the foot and kneeling figures of devotees on the pedestal. The image has been kept at the Marwari temple at Jessore and the Superintendent is in correspondence with the Collector on the subject of its acquisition under the Treasure Trove Rules. The third discovery is that of an interesting Buddhist image and was reported to the Archæological Superintendent from Dacca, but the discovery has not yet received official confirmation from the Collector. The image is stated to have been found by a Muhammadan while re-excavating a tank at Mahakali in the Munshiganj sub-division of Dacca, and is now sheltered in a newly constructed Hindu temple at Bajrajogini, in the Bikrampur pargana. The image is said to be a fine representation of Khasarpana Lokesvara, and is of great artistic and iconographical merit."

Madras. Mr. Longhurst reports that the following were acquired under the Treasure Trove Act, and are now in the Madras Museum :—

(1) A stone image of Parvati found in Thondu village, South Arcot District.

(2) A copper image of Hanuman found in the village of Vangallur, Nellore District.

(3) 45 gold South Indian *fanams* found in the village of Perukkaranai, Chingleput District.

(4) *Varahas*, bearing the legend *Rayasamu*, 1 gold *Varaha* of the Kakatiya King Ganapati and 12 gold *fanams* of the Chola King Kolottunga I, found in the Village of Kavaliyadavalli, Nellore District.

(5) 5 gold South Indian *fanams* found in the village of Kodaithandalam, Chingleput District.

(6) 18 French Arcot rupees struck in the name of Alamgir Badshah, 2 rupees struck in the name of Ahmadshah and 30 one-eighth rupees struck at Pondicherry by the French East India Company.

(7) 12 *fanams* of Rama Raja, the second son of the famous Sivaji, the founder of the Mahratta Empire, found in the village of Lachivaccam, Chingleput District. **Madras.**

(8) 51 copper coins of Kalam Ullah Shah bin Ahmad Shah, eighteenth King of the Bahmini dynasty, who ruled between 1525-1527 A. D. and 1 coin of Farrukhsiyar, found in the village of Sakhinetipalli, Godavari District.

(9) 304 lead coins which were issued by the Andhra Kings who ruled till the 2nd century A. D., found in the village of Mandur, Gantur District.

These were cleaned and treated for preservation by the Archæological Chemist.

In the Jhalawar State a hoard of coins of the Delhi Sultans was discovered at the village of Singhpur. It contained 4 gold Mohars, 96 silver rupees and some 2,000 billon coins. The find was made by some boys who were feeding cattle and casually saw some rupees lying on the surface. They dug up the place and found two metal vessels containing the treasure. "It appears, however, from information received" says the report "that 2 gold Mohars and 48 silver coins remained unrecovered." The coins received are classified as follows :—1 gold coin each of Ghayus-ud-din Tughlaq and Muhammad bin Tughlaq, 46 silver of Ala-ud-din, 1 silver each of Ghiyas-ud-din, and Muhammad bin Tughlaq and 2,060 copper or billon. Another hoard of 150 silver Hali rupees belonging to the local currency was found at the village of Garnawad. **Jhalawar.**

Eight coins were found in the State of Mewar and forwarded by that Darbar to the Resident. Three are of silver and the remainder billon. The Superintendent, Archæological Survey, Western Circle, who examined them, says regarding the billon coins that they contained a slight admixture of silver, but appear to have been gilded on the surface with some care. He classifies them as 2 silver of Muzaffar Shah II, 1 silver with Sultan Muzaffar on the obverse but the rest of the legend on both faces is destroyed, 3 billon of Ghiyas-ud-din Tughlaq and 2 billon of Firoz Shah Tughlaq. No further reports from Indian States have been received. **Mewar.**

SECTION VIII.

Miscellaneous Notes.

THE MATHURA SCHOOL OF SCULPTURE.

(*By Mr. Ramaprasad Chanda.*)

Apropos of the addition to the Indian Museum collection of so large a number of sculptures and casts from Mathura, described on pages 141 ff. of this Report, the Superintendent in charge, Mr. Ramaprasad Chanda, sends me the following note on the history of this important School. "Mathura", Mr. Chanda writes, "was the capital of the Surasenas or Surasenakas, an ancient Kshatriya clan. According to Manu II, 19-20, 'The plain of the Kurus, the (country of the) Matsyas, Panchalas and Surasenakas, these (form) indeed the country of the Brahmarshis (Brahmanical sages which ranks) immediately after Brahmavarta. From Brahman born in that country, let all men on earth learn their several usages' (Bühler's translation). Though the Surasenas are not named in Vedic literature, their neighbours in the west, the Matsyas, are named, and the epic genealogy connects the Surasenas with the Yadus and the Satvatas who find mention in the Rigveda and the Brahmanas respectively. Thus Mathura seems to have been originally a centre of orthodox Vedic culture. It is also evident from Vedic literature, that the Vedic people were deeply engaged in developing ritualism and philosophy and lacked in plastic genius. The earliest datable specimens of plastic art extant in India are the capitals of the columns of Asoka that disclose Perso-Hellenic influence. Side by side with the Mauryan school of sculpture there arose an indigenous school called by Sir John Marshall the Ancient National School, the continuous history of which may be traced for four hundred years. The iconography of the sculptures on the ground railing of the *stupa* of Bharhut, where un-Vedic divinities like Yakshas and Nagas, and un-Vedic cult objects such as *chaitya* trees and *stupas* are given prominence, shows that this school originated among a people who had a culture of their own partially independent of Vedic culture.

"No genuine Mauryan relic has as yet been found at or around Mathura. But in a village called Parkham, 14 miles south of the old city, Cunningham discovered a colossal male statue of sandstone (8′ 8″ × 2′ 8″). This has been removed to the Mathura Museum and a plaster cast of the image has recently been installed in the vestibule of the Indian Museum. On the pedestal, beside and between the feet of the image, there is an inscription in Brahmi characters probably of the 2nd century B. C. which tells us that the image was made by one Gomitra, a pupil of Kunika. Cunningham recognised in this image a Yaksha or attendant demi-god. Dr. Vogel observes, 'It does not however seem very probable that an image of this size should have served the purpose of a simple attendant'*? In the sculptures on the railing of the *stupa* of Bharhut, Devas, Yakshas and Nagas are shown as attendants, the real objects of worship in these reliefs being not images, but symbols, *stupas*, and trees. This must have been the practice not only among the Buddhists but also among other sects. It seems, therefore,

* *Catalogue of the Archaeological Museum at Mathura*, by J. P. Vogel, Allahabad, 1910, p. 83.

reasonable to regard the Parkham statue as an attendant figure, probably a door-keeper of some shrine. A concise account of the technique of this sculpture is given by Sir John Marshall in the *Cambridge History of India*, Volume I, page 620.

" Rai Bahadur Pandit Radhakrishna of Mathura has now discovered another statue of the same age, a colossal female figure seated on a wicker chair (*morā*), at present worshipped as Mānsādevī in a modern temple at a village called Jhinga-ki-Nagra, 13 miles to the north of Mathura. The head of the statue is lost and has been replaced by a modern one. The front side is covered with a thick coat of vermillion, but on the pedestal between the feet is a mutilated inscription in three lines which may be read as follows :—

(1) *Sā putehi kārito.*

(2) *Yakhilā āvā Kunikāte.*

(3) *[vāsinā Nāke] na katā.*

" '(This image of) Yakshī Lāyāva has been caused to be made by the sons of Sā, and made by Nāka, pupil of Kunika.'

" If this Kunika may be identified with the Kunika named in the inscription on the Parkham image we have to recognise in the Mansadevi a sister of the Parkham image, *i.e.*, a production of the same school by another pupil of the master. The forms of the letters of the inscription and the technique of the statue support such an assumption.

" These two statues are the crudest products of the early Indian school. In central and eastern India we may follow the progressive development of the school for more than a century (*c.* 150 to 50 B. C.) in the sculptures on the railings of the *stupas* of Sanchi and Bharhut, on the old sandstone railing round the Bodhi tree at Bodh-Gaya, and on the magnificent gateways of the great *stupa* of Sanchi. But evidences are not lacking to show that the school flourished also in Mathura. Sir John Marshall has already recognised three main classes of pre-Kushan sculptures at Mathura; the earliest belonging to the 2nd century B. C. (to which class we would assign the Parkham statue and Mansadevi), the second to the following century; and the last associated with the rule of the local Satraps.* Though very few specimens of Mathura sculpture of the second class have yet come to light, we have enough to indicate that plastic art was cultivated with as much zeal in the old capital of the Surasenas as in the land of the Avantis (Sanchi and Bharhut) and of the Magadhas (Bodh-Gaya, Pataliputra). In the working season of 1871-72 General Cunningham discovered in the compound of the Aligarh Institute a railing pillar from Mathura bearing an inscription in seven lines. 'This inscription' he writes, 'was originally cut on a corner pillar of an enclosure with sockets for rails on two adjacent faces, and sculptures on the other two faces. Afterwards another railing was attached and fresh holes of a much larger size were then cut in the face bearing the inscription. Some of the letters in the last line are doubtful; but the general drift of the record is to announce some gift of *Dhanabhuti*, the son of * * **bhuti*, in honour of the Buddhas.'†

* *Cambridge History of India*, Vol. I, pp. 632-633.

† Cunningham's Archæological Report, Vol. III, p. 36.

In September 1921, the present writer visited the Aligarh Institute but could not trace the railing pillar from Mathura within the compound. Cunningham neither reproduces nor describes the sculptures. The mutilated inscription records the dedication of a railing and gateways (*toranas*) around a *Ratnagriha* by one Vadhapala Bhanabhuti, son of Vatsi, for the worship of all Buddhas (Lüdhers' *List*, No. 125). In two Bharhut inscriptions (Lüdhers' *List*, Nos. 687 and 882) occur the names of four successive generations of a dynasty, Raja Gargiputra Visadeva, Gauptiputra Agaraju, Vatsiputra Dhanabhuti, and Kumara Vadhapala, the last two names of which are evidently identical with those mentioned in the (lost) Mathura rail pillar inscription. Prof. Rapson writes about this dynasty, 'From these sources combined we may reconstruct the family tree of this king from his grand-father king Visadeva, to his son, Prince Vadhapala; and we may conclude that this family ruled at Bharhut, and that it was connected in some way with the royal family at Mathura, more than 250 miles to the N.-W.' (*Cambridge History of India*, Volume I, pages 523-524). But if it is remembered that the Bharhut inscriptions of Dhanabhuti (Nos. 687 and 688) record the erection of the eastern and perhaps of another gateway of Bharhut by him, and that the balusters between architraves of the eastern gateway bear Kharoshthi letters engraved as masons marks while Brahmi letters appear as mason's mark on the railing, it may be inferred that the sculptors employed in carving the gateways came from the Kharoshthi using region of India of which Mathura was the eastern limit, and that Dhanabhuti was also probably a Raja of Mathura and a feudatory of the Sungas. The sculptures on the gateways of Bharhut may therefore be recognised as links in the chain of development of the Mathura branch of the Ancient National School of Indian sculpture.

"As an example, one side of a fragmentary lintel or architrave (11½" × 3' 9") of a gateway of Bharhut is reproduced in Plate XXXVII, fig. *a*. The elephants are skilfully drawn from life. The holy tree, though conventionalised, is carved with care. The two male votaries on two sides are elegantly posed. But the weakest point in the bas-relief is the crudeness of the human form. The same remark holds good of all the bas-reliefs of the Ancient National School. The human form is the most negligible factor in the composition. Full justice is not done to this factor even in the exquisite bas-reliefs of Amaravati that represent the high-water-mark of ancient Indian plastic art. The reason for this is not far to seek. The aim that the Indian sculptors had in view was not the independent creation of beauty. Their art was the dependent art of the decorator of architectural monuments. The figures they carved were not primarily meant to be things of beauty but were more in the nature of pictographs to tell a tale or point a moral. Such conditions could not but act as strong deterrents to the full development of their plastic genius. The votary on the right side of the holy tree in our bas-relief wears a long coat. A male figure draped in a long coat of this type is also seen in a bas-relief on a fragment of coping-stone from Bharhut in the Indian Museum (C. 94), but apart from these I do not remember to have noticed any figure draped in such a garment in any other ancient sculpture, whether Indian or non-Indian.

"Another specimen of Mathura sculpture of the ancient school assignable to the 1st century B. C. (pre-Kshatrapa period) is a carved fragment of red sandstone coping.

measuring 10" in length belonging to the collection acquired by Sir John Marshall for the Indian Museum. The three last letters of the votive inscription, *ya danam*, particularly the *ya* with the middle vertical line rising higher than the two arms (Fig. 2) indicate pre-Kshatrapa date. The coping is decorated, like other ancient coping stones from Mathura*, with bells alternating with buds hanging from a garland of heads. Below this is engraved on each side an animal form, evidently a buffalo, which is full of animation (Pl. XXXVII, figs. *b* and *c*.)

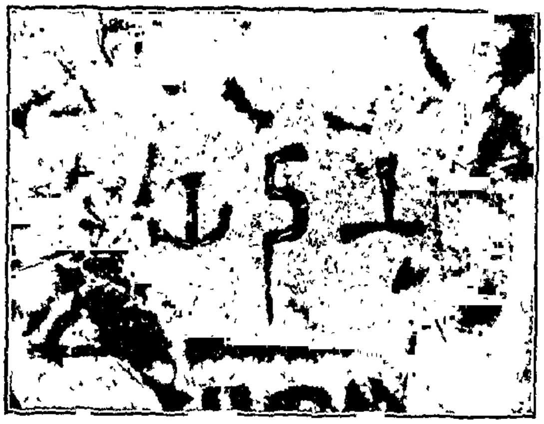


FIGURE 2. IMPRESSION OF INSCRIPTION ON COPING STONE [PLATE XXXVII (*b*)].

"The so-called Bacchanalian group from Mathura presented by Colonel Stacy to the Asiatic Society of Bengal in 1836 and a very similar sculpture found by Growse at Pali-Khera near Mathura and now deposited in the Mathura Museum, should probably also be assigned to the 1st century B. C. The group in the Indian Museum (3' 8"× 3' ×1' 3") has so often been described that no further description is called for here and reference to Figs. *d* and *e* of Plate XXXVII is sufficient for our purpose. There is a strange mixture of Greek and Indian elements in the dress of the male and female figures that make up the groups on the two sides, and also a strange mixture of Indian and Greek technique in the arrangement of the drapery of these figures The figures are cut in bold relief as in the friezes of the ancient caves of Udayagiri near Bhuvanesvar in Orissa, and like the women of those friezes, the women here too wear very thick ring anklets. But such heavy ring anklets are very rare in the reliefs of Bharhut, where most of the women wear a number of thin ones instead. In the bas-reliefs on the railings and gateways of the *stupas* of Sanchi both types of anklets are often found together. This Stacy group as well as the Pali Khera group in the Mathura Museum appear to be the work of skilful Indian craftsmen familiar with specimens of Hellenistic sculpture who probably endeavoured to dress the Yakshinis in partially foreign garb, for the pot-bellied drunken figure can be no other than the Yaksha King Kuvera and the others his attendants, Yakshas and Yakshinis.

"On the top of this group was a big bowl, the group itself serving merely as the stand for this bowl. Among the new acquisitions from Mathura there is a group (Pl. XXXVIII, fig. *b*.) measuring 2 feet by 1 foot 9 inches which has a partially damaged bowl on the top. Evidently there were sculptures both on the obverse and the reverse of this piece. Those on the obverse has been badly mutilated, but four female figures all wearing heavy ring anklets are recognizable. The half-kneeling female figure in the middle is evidently intoxicated. Her left hand is placed on the shoulders of a girl and her right hand is held by a male on the right. There are traces of another figure behind this male. This group should also be assigned to the same period as the Stacy and the Pali-Khera groups.

"With the beginning of the Christian era Mathura was probably annexed to the Saka-Parthian empire and ruled by viceroys known as Satraps (Kshatrapas and

* V. A. Smith's *Stupa and other Antiquities from Mathura*, Allahabad, 1901, Plates LXXVII-LXXXII.

Mahakshatrapas). The names of two viceroys of Mathura, Rajubula and Sodasa, are known from inscriptions and coins. The Nahar collection of casts includes one (3′ 3·5″ × 3′ 2·5″) of the image of Aryavati (Pl. XXXVIII, fig. *d*) set up by Amohini and her sons in the year 72 in the time of the Mahakshatrapa Sodasa. There are also casts of two other sculptures bearing votive inscriptions in letters of the time of the Satraps, the well known tablet of homage from Holi Gate (now in the Mathura Museum)* and another fragmentary tablet from Kankali Tila now in the Lucknow Museum (Fig. 8).† The Graeco-Buddhist school of Gandhara had probably already come into being by the time of the Satraps, and in the Mathura sculptures of the Kshatrapa period we see, instead of healthy assimilation of Hellenistic elements, the gradual strangulation of the old indigenous school by the invasion of Gandhara art. This is more evident in the sculptures of the Kushan than in those of the Kshatrapa period.

" *The collection acquired from Mathura includes two statues of Gautama Buddha* of the Kushan period bearing more or less mutilated inscriptions on the pedestal. The photograph of one of these has already been published.‡ The inscription on its pedestal reads :—

(1) .... [De] *vaputrasa Huvishka* [*sa*] *saṁ 30 9 va 3 di 5 etasya purvā* [*ya*] *bhikhuniye Puś ahathiniye*

(2) *bhikhuniye Budhadevāye Bodhisatto paratiṭhāpito sahā mātāpitehi sarva satva hita sukh.*

" ' In the year 39 of (Maharaja) Devaputra Huvishka, in the third month of the rainy season, on the fifth day,—on that (*date specified as*) above—an (image of) the Bodhisattva was dedicated by the nun Pusahathini and the nun Buddhadeva with their parents for the welfare and happiness of all creatures.'

" The head of the image and the upper part of the back slab is lost, but the rest of it and the two male attendants (whose heads are also lost) bear close resemblance to the Bodhisattva statue from Katra in the Mathura Museum.§ The Bodhisattva represented is evidently Sakyamuni after his renunciation but before the attainment of supreme knowledge (*bodhi*). The arrangement of the drapery is a mixture of Indian and Gandhara styles.

" The votive inscription on the pedestal of the other seated Buddha of the Kushan period (1′ 11″ × 2′ 3″), an ill-executed and lifeless copy of the Gandhara type, is very badly mutilated (Fig. 9) .... (*ha*) *rajasa Deva*....is clear in the beginning, and the date portion of which the letters are defaced I venture to restore as, *sava* 30 *gri di* Huvishka began to reign from the year 29 if not from the end of the year 28, the last known date of Vasishka, so that this image also belongs to the reign of Huvishka.

" Far more interesting than these two images of the Kushan period is a third image of the seated Buddha (Fig. 10, 2′ 4″ × 2′ 2″) from Mathura. The head and hands are

* Vogel's *Catalogue*, Plate V.
† V. Smith's *Jain Stupa*, Plate XII.
‡ A. S. I. Annual Report, 1916-17, Part I, p. 13, Plate VII (c).
§ Vogel's *Catalogue*, pp. 47-48, Plate VII.

lost, but the most deplorable loss in connection with this statue is that of the inscription on the pedestal. It was a long inscription in characters of the Gupta period in at least four lines. Only the first few letters of the first line may now be read. These letters are :—

Maharaja radhiraja..................*Radhiraja* is of course *rajadhiraja*, and the name that followed was probably that of one of the early Gupta emperors. This statue shows that the Mathura school of sculpture which came into being in the time of the local Satraps and thrived under the Kushans existed, like the Gandhara school at Taxila, up to the time of the Gupta emperors. But in this sculpture we already notice the dawn of that idealism which is the distinguishing feature of the Gupta school.

" Another sculpture in the Indian Museum of the same transitional type and time is the inscribed statue of the Bodhisattva of red Mathura sandstone (3′ 11″ × 3′ 1½″) from Bodh-Gaya (Fig. 11). Cunningham found this 'near a small ruined temple close to the south gate of the railing of the great temple at Bodh-Gya,'* and published a facsimile of the inscription on Plate XXV of his work Mahabodhi. Since that impression was taken the inscription has suffered considerably.† The following transcript is prepared from Cunningham's plate compared with the original as far as it is now preserved :—

L. 1. *Mahārājasya Trikamalasya sa 60 4 gri 3 di 5* [*eta*] *sya purvvāya bhikshu Vinayadharasya. viharasya sadivihari Vina* [*yadhara*] [*bhikshu*].....

L. 2. *mātyadharavihāra svakena samartho srame* [*na*] *kā Bodhisatva paṭimā Siharatha pratisthāpayati upāsikaye artha-dharmasahāyitīye Dhanna.... taka............ye savva*

L. 3. ....[*sa*] *hāyatā dharmakathikena Dha. na* II *imena kuśalamūlenā mātāpituṇaṁ pūjāye bhavatu upadha* [*ya*] ....*jāye*..........*dha*............*dhi.*

" There are three sentences in this inscription. The purport of the first sentence appears to be : A monk who was a teacher of the Vinaya, and who was the companion of another monk who was also a teacher of the Vinaya, caused one Simharatha to dedicate this image of the Bodhisattva in the reign of Maharaja Trikamala in the year 64, on the 5th day of the third summer month. In the second sentence occurred the names of two persons, a female lay disciple and an expounder of the holy text who evidently helped the donor Simharatha. The stone used for this image is from Mathura, the style is of the Mathura school, and the mixed language used in the inscription reminds one of the language used in the inscriptions of the Kushan period. It may therefore be inferred that the image was imported from Mathura. The characters used are of the Gupta period and if the year 64 is referred to the Gupta era and taken as equivalent to A. D. 383 we obtain a date towards which all the evidences converge. Maharaja Trikamala was probably a feudatory of the Emperor Samudragupta or his successor Chandragupta II.

* Cunningham, *Mahabodhi*, London, 1892, p. 21.

† See Dr. Bloch's remarks in J. A. S. B., Vol. LXVII, 1898, Part I, p. 282.

"Two other sculptures from Mathura (6′ × 2′ 2″ and 4′ 9″ × 1′ 9″) in the Indian Museum, both of them standing figures of Buddha of red sandstone (reproduced in figures 12 and 13) bring us very close to Gupta sculpture as is shown by a comparison with the standing image of Buddha from the Jamalpur mound with inscription in Gupta characters which is now in the Mathura Museum (A. 5, Fig. 14). The pedestal of No. 12 with feet is lost. The halo of figure 13 is lost and the inscription on its pedestal is totally defaced leaving very few traces. There is a family likeness between the halo of figure 13 and that of figure 14 and the drapery in all three is shown in almost exactly the same manner. But between the two former and the latter there is a great difference in execution and expression. The limbs of the former pair appear wooden as compared to those of the latter, though the limbs of the latter are themselves rather stiff and the shoulders and arms look heavy. The face of the two red sandstone Buddha images like the face of the Bodhisattva image from Bodh-Gaya is characterised by a calmness met with only in a small percentage of Gandhara statues and conspicuous by its absence in the Mathura sculptures of the Kushan period. But in figure 14 we find embodied that deep spiritual contemplation which characterise the masterpieces of the great Gupta school. Hellenistic influence flowed into the art of the Gupta period through Mathura, for in Mathura alone we meet with transitional forms. There is apparently a gap of about three centuries in the history of sculpture in Eastern India between the Sunga and the Gupta periods, and almost all sculptures of the intervening page that are found there are either importations from Mathura or are works of artists from Mathura with red sandstone as the material. The ancient national school of sculpture of which the main function was to decorate the railings and the gateways of stūpās probably died out in Eastern India with the rise of Māhāyana Buddhism which threw stūpā worship rather into the background by bringing into prominence the Buddhas and the Bodhisattvas, but it thrived in the Andhra kingdom at Amarāvatī and in the caves of Western India of the later Andhra period. The Gupta school of sculpture arose in the middle-land of Northern India extending from Mathura to Sarnath when under the dominating influence of *bhakti* or the love of the Supreme Being (as distinguished from *jnānā* or *bodhi*, supreme knowledge), the Buddhists, the Jains, the Vaishnavas and the Saivas felt the necessity of giving shape to the Bhagavat. The model of Buddha was found ready to hand at Mathura. But the sculptors displayed their creative genius in carving Brahmanic image of which splendid specimens are still extant in Central India and the Deccan.

"Indian art reached the height of its power in the Gupta period. All over Northern India and the Deccan and even in Ceylon we find sculptures of this period inspired by a central tradition. But after the decline of this tradition by the end of the 7th century A. D. there arose at least three great local schools, the East Indian or Pàla, the West Indian and the South Indian schools. In the Departmental Report for 1921-22 (pages 104 ff) I dealt briefly with certain aspects of the art of the Pala school."

DID BUDDHA DIE OF EATING PORK?

(*By R. B. Daya Ram Sahni.*)

"It is generally believed by scholars that the Buddha died of eating a dish of pork offered to him by Chunda, a smith of Pava, where the Master halted before reaching

Kusinara and which General Cunningham identifies with Padarauna. Thus Prof. Kern in his *Manual of Indian Buddhism*, pp. 42-43, states that the smith prepared for the Buddha and his followers a 'meal consisting of rice with cakes and pork,' that the Master took for himself the pork, leaving to the disciples the other food. After the dinner he desired Chunda to bury what was left of the pork, because no one in the world could digest such food except the Tathagata. In a little book entitled *A Buddhist Catechism*, Rai Bahadur Pandit Sheo Narayan of Lahore contradicts this view and suggests that the expression *sukaramaddavam*, which has been taken by scholars to mean 'the tender or palatable meat of the boar,' really means 'the boar's joy or the wild pig's delight,' *i.e.*, a species of edible mushroom much sought after by the boar in India. Mr. Sheo Narayan adds that among the mushrooms prepared by Chunda for the Tathagata there must have been some poisonous ones which the Master perceived at once and commended the smith not to give any of them to his disciples but to throw the remainder away as unfit to eat. It is interesting to observe that Tibetan works* contain no mention of the pork which is said to have caused the inflammation which brought about the Budda's death, but simply say that 'Chunda had prepared for the Blessed one a quantity of delicious food.' In this connection it is interesting to recall what the *Athakatha*, Buddhaghosha's commentary on the *Mahaparinirvana-sutra*, has to tell us on the subject. The expression for the food offered to the Buddha by Chunda in the Pali texts as stated above is *sukaramaddavam* and Buddhaghosha offers three alternative interpretations for it. In the first place, it is suggested that the meal consisted of the flesh of a pig, neither too young nor too old, which was soft and unctuous and which had been obtained without difficulty. In the second place, Buddhaghosha informs us that some scholars of his own time read the expression as *sukaramaddavam, i.e.*, what is easily digested and soft, *viz.*, rice seasoned with the five products of the cow. Lastly we are informed what some *acharyas* in Buddhaghosha's time understood *sukaramaddavam* to mean a kind of medicinal compound (*rasayana*) which Chunda had prepared to prolong the Buddha's life and to prevent his attaining *parinirvana* soon. These extracts from Buddhaghosha will show that already in the 3rd or 4th century the exact meaning of the expression referred to had become forgotten, giving rise to the various conjectures mentioned above. It will also be seen that the meaning of an edible mushroom suggested by Mr. Sheo Narayan finds no mention in at least the comments of Buddhaghosha, though it would easily be covered by the alternative meaning of 'palatable food' suggested by him."

MAJHGAWAN PLATES OF HASTIN.

(*By Mr. K. N. Dikshit.*)

"In editing the Majhgawan plates† of king Hastin, dated in the 191st year of the Gupta era, Dr. Fleet reads part of line 6 as '*Mahādevideva-sukha-vijñaptaya*' and interprets it as 'at the gracious request of Mahadevideva.' It is however clear from the facsimile that the correct reading is '*Mahādevi-Devasukhā-vijñaptaya*,' which may be translated as 'at the request of the chief queen Devasukhā.' This reading is further corroborated by the mention of the queen Devasukhā in the following passage '*ātmanascha punyā-ābhivriddhaye-Mahādevi-Devasukhām cha svargga-sopāna-panktim-āropayatā*. (U. 7-8) which may be translated as 'for the accumulation of his own religious merit and making the chief queen Devasukha ascend the ladder leading to heaven'."

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* Rockhill's *Life of the Buddha*, p. 135.

† Fleet-Corpus Inscriptionum Indicarum, Vol. III, No. 23, p. 106 ff.

A HOMERIC BAHUVRIHI.

(By Dr. Spooner.)

Students of the Odyssey will remember that in the 1st Book, where Athene in the guise of Mentes is trying to infuse a manly spirit into Telemachus and is inciting him to make a stand against the crowd of suitors for his mother's hand who are wasting his substance with their revels, she says to him:

τοῖος ἐὼν μνηστῆρσιν ὁμιλήσειεν 'Οδυσσεύς·
πάντες κ' ὠκύμοροί τε γενοίατο πικρόγαμοί τε. *(Od. I., 265-266).**

In his recent edition of Homer, in the Lœb Classical Library, my former Greek *guru*, Professor A. T. Murray, renders this: "Would, I say, that in such strength Odysseus might come amongst the wooers; then should they all find swift destruction and bitterness in their wooing." As a translation of πικρόγαμοι this is an improvement on Liddell and Scott, who render the word "embittered in marriage," "unhappily wedded"; but is it not possible that the real point of the Homeric compound has been missed in both versions? That Liddell and Scott cannot be right is sufficiently clear from the fact that the wooers were as yet suitors and had not attained to marriage. This point Professor Murray has guarded in his "find bitterness in their wooing," as this avoids the idea of consummated marriage; but even this does not seem to me to have the full flavour of the original, and the word γάμος obviously means *marriage*, instead of *wooing*.

I am aware that our Greek teachers do not ordinarily talk about *bahuvrihi* compounds, although formations of identical type are frequent on every page of Greek.† How these are explained by the Dons I no longer remember, after more than twenty years of India, but it is obvious that in the present case neither of our translators has had what I may call a *bahuvrihi* "feeling" for the compound πικρόγαμοι. Liddell and Scott render it as though it were a sort of *tatpurusha* compound in an inverted order, *i.e.*, as though instead of πικρόγαμοι we had γαμοπίκροι, to be understood in the sense of a Sanskrit *vivāha-klishia* or its equivalent, that is *by marriage embittered marriage-embittered* (an instrumental *tatpurusha*). Professor Murray's rendering is equally against the actual word-structure, though yielding a better sense, as was mentioned above. I cannot help feeling, however, that both these authorities do violence to this word-structure in their interpretations, and that this is neither desirable nor even necessary. If we approach the Greek compound in the Paninean spirit, and resolve it on Paninean lines into its constituent elements as a *bahuvrihi*, we shall get, literally, "those to whom marriage was hateful," and this I beg to submit is Homer's real meaning: (*Would that Odysseus might come!*): *then forsooth were they all men of short shrift, to whom marriage were hateful*: that is to say, they would be so cured of wooing that the very thought of marriage would be hateful to them for the rest of their lives. This rendering has what seems to me the further advantage of preserving the *bahuvrihi* quality in the companion adjective ὠκύμοροι also; "those whose doom was swift" or "whose shrift was short" seems to be literally the meaning here and to retain a hint of the word-structure, though in this case the net result is much the same. In the case of πικρόγαμοι, however, it seems to me that we come appreciably nearer to the sense of the original by an analysis on Paninean lines.

* The passage is repeated verbatim in Book IV, 345 and again in Book XVII, 136. In Keep's translation of Dr. Autenrieth's *Homeric Dictionary*, page 261, (to which Mr. Cuthbert King calls my attention), it is rendered: "for all would be a speedy death and a *bitter marriage.*" This again seems to miss the *bahuvrihi* quality of the compound.

† *Cf.* χαλκοχιτώνων, *in line 286*; δολόμητιν *in line 300*; γλαυκῶπις *in 314*; 'οβριμοπάτρης, *III, 135, etc., etc.*

THE NALANDA GODDESS WHO TRAMPLES GANESA.

(By Dr. Spooner.)

In my excavations at Nalanda in the cold weather of 1917-18, a broken statuette was found at site No. 3 (the southernmost of the long line of stupa mounds), which was numbered 61 in the field register, and an illustration of which was reproduced as Fig. *b* of Plate XIV of the *Annual Report of the Director General of Archæology in India* for the year named. The fragment in question shows the lower portion of a goddess, in the "archer" posture, stepping out toward the spectator's right with the proper left knee advanced and the left foot shown as trampling upon a prostrate figure of Ganesa. When this sculpture was first found and when it was first published, I could not identify the figure, and the piece was accordingly marked as problematic. The only Buddhist deity I could then trace which is commonly represented as trampling upon Ganesa was Mahakala, the patron deity of Mongolia, and I could do no more than guess that the Nalanda statuette might conceivably represent a Sakti of Mahakala, though this was admittedly nothing but a conjecture. I now learn, thanks to Mr. K. N. Dikshit, that Mr. Binoytosh Bhattacharya, who has in hand the preparation of a book on Buddhist Iconography, has identified this Nalanda figure as Aparājitā. In his *Étude sur l' Iconographie de l' Inde* M. Foucher includes a personage of this name among goddesses mentioned in the texts but not iconographically citable (*op. cit.* p. 101), but apart from this the only Aparajita I have so far found mentioned occurs in Mr. Kaye's useful index to Sir John Marshall's *Annuals*, where however she is a form of Chamunda.* The Aparajita now identified by Mr. Binoytosh Bhattacharya is a Buddhist goddess, whose most conspicuous cognisance is the fact of her trampling upon Ganesa, while an umbrella is held above her head by one or other of the "mischievous" Hindu gods. Behind the figure of the goddess in the Nalanda statuette a diminutive figure identified by Mr. Bhattacharya as the god Indra is depicted holding the handle of a parasol, so that Mr. Bhattacharya's identification appears to be certain. I will not quote further from the material kindly placed at my disposal by Mr. Bhattacharya, lest I forestall his forthcoming book in which he proposes to give the *sādhana* in full; but I mention the identification here in order to correct my previous publication, and to record my indebtedness to Messrs. Bhattacharya and Dikshit for bringing the true significance of the Nalanda figure to my notice.

PLACE-NAMES IN BURMA.

(By M. Charles Duroiselle.)

M. Charles Duroiselle gives in his Annual Report a brief list of the principal classical place-names in Burma, with a short note added to each, showing their origin and identification. To those who are interested in Burmese history, a study of these names will be of assistance in the elucidation of doubtful points in connection with the old political and religious history of the country. "Some of them shew," M. Duroiselle says "religious influence other than Buddhism proper at work in the province and others the hold which the sacred books of Buddhism and their commentaries had acquired on the popular mind. On the whole it is considered that the paramount civilizing

* Annual, 1903-04, page 219.

influence in Burma was Indian almost to the exclusion of China, whose relations with Burma were mostly of a warlike character.'

" A large number of districts, towns and even villages in Burma possess two names and sometimes more. Of these, only one is thoroughly Burmese and generally known among the people, the other or others being either imported from India through the medium of the sacred books of Buddhism and their commentaries, or coined on the model of those existing in India. The former type of name may be called classical and the latter type, pseudo-classical. The origin of this practice of renaming already existing towns is not far to seek, and may be referred, in the first instance, to the desire of a people freshly converted to a new faith (Buddhism in this case), to sanctify, so to say, their own land, and to identify it as closely as possible with the land in which the new cult originated. Thus they made Buddha come over to Burma on many missions, or the locus of some of his births in previous existences was placed in Burma. In many of these cases, the place-names mentioned in the *pitakas* or their commentaries are applied to the places thus sanctified. Secondly, it may be attributed to the pride of the Burmese race, and to its endeavour to affiliate the Burmese dynasties not only to the great dynasties of India, such as the Solar and Lunar, but above all to show the direct descent of Burmese kings from the clan of the Sakyas, of which the Buddha was a member. In most of these cases, the ancient history of India, as it was then known through passages in the *pitakas* and other Pali sources, is put under contribution, and naively manipulated to suit the new circumstances. There is, however, a small number of names which cannot be so easily identified. There are also names which seem to go back to direct Hindu influences and which seem to have been transplanted on Burmese soil by Indian immigrants, bringing with them the names of the regions in India whence they came."

As to their age, M. Duroiselle thinks that " some of these, such as Mweyin on the upper Irrawaddy, Sriksetra or Old Prome and Hamsavati (Pegu) go back to soon after the beginning of the Christian era, while others, mostly in the Deltaic Provinces, must have been transplanted after the 5th-6th century A. D. Most of them, however, do not antedate the 11th century, when the purer form of Buddhism imported from Thaton spread rapidly all over the upper country, and when devotion and scriptural learning were intense."

FOUR BURMESE SAINTS.

(By M. Charles Duroiselle.)

In the same report, M. Duroiselle gives a short notice of each of the four Buddhist saints, *Shin Upagok* (Upagutta thera) *Shin Thiwali* (Sivali thera), *Shin Angulimāla* (Angulimala thera) and *Shin Peindola* (Pindola thera), who are especially well known in Burma and worshipped as saints. " This worship of saints, however, is not so extensive as in some other Buddhist countries, for instance Tibet, and is restricted to the unenlightened among the Burmese. It is often associated with the performance of such rites, as the recitation of formulæ (often written in an incomprehensible jargon, much resembling the *mantras* and *dhāranis* of Northern and Tantric Buddhism), and with the construction of small shrines of complicated nature. At the same time, people

worship these saints with a view to obtaining worldly advantages and particular favours: Such practices are properly not tolerated by the Theravāda system of Buddhism now prevailing in Burma; and it is the attribution to these saints of the power of granting to their devotees that which they ask for on the performance of certain rites, which the more enlightened among the Burmese regard as unworthy of their great religion."

In his note on Shin Upagok, M. Duroiselle enters on a short discussion regarding the origin of this saint and the introduction of his worship into Burma. "The name of this patriarch is not mentioned among the Pali canonical books and their commentaries, and for this reason it has been rightly said that his worship is not in accordance with the orthodox form of Buddhism now prevalent in Burma. Moreover, it had been generally thought, up to now, that this legend was not to be found in any Pali work* whatever. However, the story of Upagok and his homeric fight with Mara is given in three Pali works, *Lokapaññati, Cūlavaṁsaṭīkā* and *Mahāvaṁsaṭīkā,* and the Burmese version of the story is given in the *Mahayazawin* and *Jinatthapakāsanī Kyam.* The one in the *Mahayazawin* is based on the *Lokapaññati* and that in the *Jinatthapakāsanī* on the two *ṭīkās* mentioned above. But, since the canonical Pali books and their commentaries do not know Upagutta nor his fight with Mara, the question arises as to the source from which the above three works derive their story. I am inclined to think that the *Lokapaññati,* which appears to be a later work, derives its version from the two *ṭīkās,* which in their turn must have borrowed directly from Northern sources; for the legend of Upagutta and Mara is well known among the Northern Buddhists as is attested by several closely similar recensions of the story; and Northern Buddhist sects were not unknown in Ceylon.

"Another interesting question is: when and how did the Burmese come to know the legend and place Upagutta in their popular pantheon? On this point also I am inclined to the view that the Mahayanist influence, which reached Burma before the 11th century A. D., and which has now become extinct owing to its displacement by the southern form in the 11th century, is mainly responsible for the introduction of this saint into Burma. He is represented in the form of a monk sitting cross legged with the soles of his feet upwards; his begging bowl is placed in his lap with the left hand holding it, while his right hand is held inside the bowl as if in the act of taking the food it contains; his head is turned slightly upwards and over his right shoulder expecting the sun to appear among the clouds. In spite of the protests of many orthodox Buddhists in Burma against his worship, Upagutta enjoys a great popularity among the people, and is propitiated for obtaining fine weather when such is thought desirable on festival days. In lower Burma, especially in Tenasserim District. a flotilla of small boats or rafts of lights may be seen at nights, in the month of December, floated down the rivers in honour of this saint, who is popularly believed to be still living in a golden monastery in the sea. The southern Buddhists of Ceylon have ascribed most of the incidents in the life of this saint to Mogaliputtatissa. That both are one and the same person has long been clearly proved.

"*Shin Thīwali* (Sivali) and *Shin Angulimāla* were well known among the southern Buddhists. The worship of Sivali is, so to say, more familiar and a small figure of this

* See Duroiselle's *La légende d'Upagupta et Mara,* in Bulletin, Ecole Francaise d'Extreme-Orient, 1904, pp. 414-428.

saint may be seen in many households among the Buddhists. He is invariably represented standing carrying all the requisites of a monk with fan and staff, and his worship is believed to bring good fortune and prosperity. In the time of the Buddha *thera* Sivali was among those saints who were famous each for a particular gift. The gift of Sivali was as the result of a good deed performed in a former existence, that of all the monks it was he who received the most offerings, of every conceivable kind, from the laity : and his worshipper naturally enjoys no small share of that extraordinary virtue. *Shin Angulimala* is not worshipped in the proper sense of the word, but is propitiated by pregnant women especially those in difficult labour, for a happy delivery. This practice is founded on an incident in the life of the saint, who had been a famous robber and murderer, terrorizing whole districts by killing people, cutting off their forefingers and hanging them like a garland round his neck. Shortly after his conversion by the Buddha and his becoming a monk, as he was going on his round for food, he saw a woman in difficult labour. Going back he told the Buddha of this pitiful sight. The Buddha ordered him to return to the woman and to make the following act of asseveration. 'My dear, I do not remember, from the moment I became one of the Aryan family that is, entered the order of monks having wilfully deprived of life any creature; through this statement of truth, may thou be well, and thy delivery safe.' Angulimala returned as ordered and immediately after the above statement had been made the woman was painlessly delivered. The people, seeing this marvel, placed on the very spot a bedstead and brought thereto women in difficult labour. As soon as they touched the bed, they were delivered. When women were too weak to be brought, the people washed the bed and poured the water on their heads and the same result took place. As far as I am aware, the image of this saint is to be found nowhere in Burma except at Pagan, on the platform of the Shwezigon Pagoda. There he is placed in a shrine, and nothing distinguishes the figure from that of an ordinary monk. The pregnant women of Pagan and the villages in the neighbourhood repair to his shrine, when near their time, and offer him flowers and candles for a happy delivery. A woman in difficult labour bears in mind the virtues of Angulimala and recites a short Pali text, when it is said, a happy delivery generally follows.

" *Shin Peindola* is also well known among the southern Buddhists, but is not known as the son of Hariti, the ogress. Some of his pictures as a novice may be seen on the wall paintings at Pagan in connection with an incident in the life of the Buddha. In Burma he is not now, if he ever was, given any such particular veneration as is the case with the three saints mentioned above."

SECTION IX.

Indian States with Archæological Departments of their own.

One of the most encouraging signs of the times in the field of Indian Archæology is the increasing interest in ancient monuments and antiquarian research now being evidenced in several of the more important of the Indian States. Mysore has maintained an Archæological Department of its own for many years past, but more recently State Archæologists have been appointed by Hyderabad, Kashmir, Gwalior and Bhopal as well. Brief notes on the work done by these officers have been published from time to time in previous issues of this Report, but recorded under the several sections, Conservation, Exploration, etc., and not published together as homogeneous wholes. There being, however, a noticeable and gratifying tendency for these statements, which are forwarded to us by the courtesy of the several Durbars, to grow both in extent and in interest, it seems desirable, now that the form of our own Reports has been altered, to reserve a special chapter for those Indian States which maintain Archæological Departments of their own, and to publish such statements as are sent to us by the several State Archæologists as separate, self-contained sections in each case, thus enabling the reader to get a more rounded conception of the excellent work which is being done in these territories than is possible when the statements are split up under a number of heads.

Hyderabad. The admirably enlightened policy which is being followed by the Government of His Exalted Highness the Nizam of Hyderabad in regard to the preservation, study, and ultimate publication of the Buddhist frescoes in the Ajanta caves has received frequent appreciative mention in Sir John Marshall's Reports. The archæological activity of the State is not, however, by any means limited to this work. During 1922-23, to be sure, Mr. Ghulam Yazdani, the permanent Director of Archæology in Hyderabad, has been absent, having been deputed to visit and to study all the more important of the Saracenic monuments of the Mediterranean littoral, from Constantinople to Granada, but the work of his Department has been carried on in his absence by Mr. S. A. Asgar Bilgrami, who has very kindly forwarded me, with the consent of the Durbar, the following account of the year's activities. Mr. Bilgrami writes :—

Conservation. " A total sum of Rs. 33,610 was spent on conservation of monuments. The most important single undertaking was the setting up of a carved marble screen, with marble flooring and a neat marble inscription slab, around the grave of the Emperor Aurangzeb. This work has now been completed, at a cost of Rs. 20,000. At Ellora and the Ajanta caves repairs have also been completed, the main items consisting of building neat props of ashlar masonry and the inserting of masonry blocks inside walls, together with the thorough cleaning of the caves.

" The famous Madrasa of Mahmud Gawan at Bidar has been placed at the disposal of the Education Department after extensive repairs, for the use of the new Middle School of Bidar. It was considered to be in the fitness of things to allow the rising generations of the town to receive their education in this College of historic associations, where Mahmud Gawan himself is said to have been one of the Professors of Theology in olden days.

Hyderabad.

"During my inspection of this monument I noticed a big crack in the existing minaret of the mosque, which is adorned with rich Persian enamel of resplendent colour. Immediate steps for its preservation have been taken after consulting Sir John Marshall, Director General of Archæology in India, and experts of the State Public Works Department.

"An estimate amounting to Rs. 4,606 has also been sanctioned for the restoration of the Sola Khamb Mosque in the Bidar Fort, which is a massive building with interesting historic associations. Prince Aurangzeb after his conquest of Bidar in 1686 had the Khutba read here in the name of Emperor Shah Jahan. Another estimate amounting to Rs. 5,770 has been sanctioned for the conservation of the Toli Masjid, in the suburbs of Hyderabad on the way to Golconda. The date of erection of this building is 1082 A. H. (1671 A. D.) which is inscribed in the prayer niche of the mosque. The chief interest of the building lies in its stucco decorations.

"The important work of preparing faithful tracings in outline of the Ajanta paintings, on which two artists were engaged, has been completed; it comprises tracings of the Jatakas of caves 1, 2, 16 and 17, which will be published as illustrations to the 'Guide' of M. Foucher.

"Rupees 5,000 have been sanctioned as initial expenses for the restoration of the garden of the famous Bibi-ka-Maqbara (Taj) at Aurangabad, and an annual grant of Rs. 3,000 has been allotted for the upkeep of the garden.

"Mr. Ghulam Nabi, Mechanic, who was trained under Professor Cecconi, is engaged in restoring the frescoes of caves 1, 17 and 19, in accordance with the process of the Italian experts.

Exploration.

"In the grounds of Jauhari Bazaar (Aurangabad) seven small images of polished black basalt were discovered at a depth of about 8 feet; these were brought to my notice during my tour and I had them forthwith transferred to the Hyderabad Museum. All of these images are inscribed but the characters are much obliterated. As a result of careful examination the date has been deciphered as 1548 Sakha (1726 A. D.).

"In the ancient town of Peitun (*Pratisthana*) while digging a site for the erection of the Munsiff's Court, the Public Works Department came across a number of burnt bricks of considerable size. During my visit to Aurangabad the entire area was declared 'protected' and I brought back one of these bricks for the Hyderabad Museum. Its dimensions (24″ × 12″ × 4″) are larger than Mauryan ($21\frac{1}{2}''$ × $14\frac{1}{2}''$ × $3\frac{1}{4}''$) in the Sarnath Museum or Kulpak (Chalukyan) bricks ($15\frac{1}{2}''$ × $8\frac{1}{2}''$ × 2″). Another important discovery was made in the Jedcherla (Mahbubnagar District), namely a Buddhist monument which bears a striking resemblance to the ancient Buddhist tower formerly in Negapatam which was unfortunately pulled down *with the consent of the Madras Government* by Jesuit priests in 1867. The tower, which is quite a unique monument is composed of large sized bricks (16″×10″×3″) with a regular layer of very fine concrete, and may be the only specimen of its kind now in existence, the one at Negapatam being destroyed. Adjoining this tower there are numerous mounds with sculptures scattered in abundance. I have declared the whole area 'protected' and a detailed survey of these remains is contemplated.

"The outstanding feature of the year's work in the field of epigraphy," Mr. Bilgrami says, "is the listing of the Archæological Monuments of the Dominions. I have practically finished the first volume of the series relating to the monuments of Hyderabad and its suburbs; other volumes comprising the ancient remains of the various other districts are in course of preparation. In this work I am following the principles laid down by the Superintendent, Archæological Survey of India, Northern Circle. The list will be an authoritative and up-to-date record of the history and inscriptions of all the principal monuments of the Nizam's Dominions. **Hyderabad.** *Listing of Monuments and Epigraphy.*

"Estampages of about sixty new records of the early Muhammadan period were taken and deciphered. The majority of these inscriptions come from Udgir and Bidar and will be dealt with along with the list of Archæological Monuments of Bidar District. A detailed article on the inscriptions of Udgir (hitherto unpublished) has been contributed by me to the *Epigraphia Indo Moslemica.* *Epigraphy.*

"An important inscription was copied at Shukrullah Guda (Maula Ali) which relates to a mosque built in 1019 A. H. (1610 A. D.). The calligraphy of this inscription is in the best *Thulth* of the early Qutb Shahi period. The inscription is in Arabic and is important for both literary and epigraphical reasons.

"A number of Muslim inscriptions sent by the Assistant Superintendent for Epigraphy, Southern Circle, Madras, were deciphered by me and returned in due course."

Mr. Ramchandra Kak, Superintendent of Archæology in Kashmir State, sends me the following account of his conservation work this year:— **Kashmir.** *Conservation.*

"The nature of the remains excavated recently at Harwan necessitated the execution of repairs to them side by side with their exploration, on which a separate note will be given later. The measures of conservation carried out comprised the dismantling and rebuilding of walls out of plumb, the filling up of gaps in the masonry of the structures to secure their greater stability, levelling the excavated area, and planting iris to screen accumulations of débris. *Harwan.*

"By order of His Highness the Maharaja Sahib Bahadur a small temple-like shed was erected over the large Sahasramukha Siva *linga* at Siligam. *Siligam.*

"The foot-path leading up to the temple commonly called Sankaracharya's temple on the top of the Takht-i-Sulaiman hill above Srinagar was widened, and in places was provided with stone retaining-walls and wooden railings. The wooden shed outside the tomb of Zainu-l-'Abidin's mother was dismantled, as it was in a perilous condition and a constant menace to life and property. *Srinagar.*

"The small ruined fort at Ramgarh, in Tahsil Samba, was originally a very unpretentious structure, being built for the most part of sun-dried bricks which have now again become clay. The only portions built of *pakka* brick masonry are a plain octagonal tower and a part of one side enclosure wall. It was not for its architectural beauties (for it has none) but for its historical interest as the birth-place of Maharaja Gulab Singh, the founder of the present Ruling Family of Kashmir, that it was conserved. The chief measures were the levelling of the quadrangle, removal of débris, filling up of several vertical fissures in the walls of the tower, and underpinning in various places." *Ramgarh.*

Kashmir.

Exploration.

As regards his exploratory work, Mr. Kak reports: "The excavations at Harwan were continued and systematized. As the site is a large one, operations were concentrated on and around the apsidal temple. The whole apse as well as the entire courtyard was exposed to view. The latter was found to be almost entirely paved with figured titles, the chief decorative feature of which was the occurrence at different points of a number of concentric circles of different patterns and motifs. In front of the back wall was found a long platform 4 feet or so wide, ornamented with sculptured titles. These titles throw an important light on the Archæology and Ethnography of Kashmir in the 4th and 5th centuries A. D., the period to which they may be assigned with tolerable certainty. Not only do they evince the influence of the contemporary art of Gandhara, which would not be a matter of surprise, but they also reveal unmistakable traces of the Sassanian Art of Persia, and perhaps, to some extent, the art of Central Asia.

"The apsidal temple is built of diaper-pebble masonry, which consists of small pebbles an inch or a little more in diameter, interspersed at intervals with larger stones. The difference in the size of the materials and their arrangement forms a very attractive feature of this style; but strangely enough the evidence available at present seems to indicate that it was concealed under a casing of tiles. Nearly all the tiles bear Kharoshti numerals on them, a script which prevailed in the north-west of India up to about the 5th century A. D.

Panjnara.

"The temple at Panjnara in the Tahsil of Rajauri has already been described in some detail in my Memoir on Bhimbar and Rajauri, published as Memoir No. 14 by the Archæological Survey of India. Excavations along the foundations revealed the inner side of the peristyle and the plinth of the central shrine. From the style of the architecture it appears that the temple resembles in almost all respects that at Buniyar on the Jhelum Valley Road and belongs to the 8th or 9th century A. D. Of the few minor antiquities found, hardly any were of importance or such as would be useful in determining the date of the structure with greater precision."

Museums.

As Honorary Curator of the Srinagar Museum, Mr. Kak reports that: "Most of the exhibits in the Natural History Section were rearranged. The birds and mammals set up in the show-case and on detached stands were provided with permanent descriptive labels, painted on strips of metal. In the Archæological Section the large sculptures which were formerly on the floor have now been provided with stone bases and explanatory labels. A number of fragmentary images have been sorted out and pieced together. Thirty-nine silver and one hundred copper coins discovered in the Jammu Province were acquired. Of the former 5 belong to the indigenous Sultans of Kashmir and the remaining thirty-four to the Mughal Emperors. In the Industrial Section a few samples of good walnut-wood carving; carved and plain silver ware; brass toys ornamented with chip turquoise; a set of coral beads; and a number of precious stones, such as agate, cornelian, lapislazuli, tiger-eye, etc., cut in Srinagar, were purchased. Among the *papier mâché* articles the most remarkable is a fine set of *Qalamdāns* with other writing materials."

Publications.

"The Handbook to the Sri Pratap Singh Museum, Srinagar, is in the Press with Messrs. Thacker Spink & Co. of Calcutta and is expected to be out very soon.

" Besides this, the Superintendent has completed or has in preparation the following new works :— Kashmir.

1. A Memoir on the Antiquities of Marev-Wadwan (Kashtwar) already submitted to the Durbar.

2. A Guide to Kashmir Monuments, also submitted to the Durbar.

3. The Annual Report of the Department for 1978, already submitted to the Durbar. This also will be sent to press as soon as sanction for its publication is received.

4. A Memoir on the Antiquities of Basohli and Ramnagar is in preparation."

It has been very gratifying to learn from Mr. Ghosal, heretofore Curator of the Museum at Sanchi, wherein is housed the large and important collection of antiquities recovered by Sir John Marshall in the course of his excavation and conservation of the Sanchi Topes, that with effect from April 1922 Her Highness the Nawab Begum of Bhopal has created an Archæological Department and has promoted Mr. Ghosal to be Superintendent of Archæology for the State of Bhopal. All the antiquarian remains of the State are to be in Mr. Ghosal's charge, but during 1922-23 the only work reported on has been at Sanchi. In regard to this Mr. Ghosal writes :— **Bhopal.**

" For the efficient conservation of the Museum and site at Sanchi Her Highness has appointed an overseer, a head chaukidar, an assistant chaukidar, and a posse of coolies, all of whom worked under the supervision of the Curator-Superintendent, who visited the Topes 24 times during the twelve months under review to supervise the conservation work. In October, after the rains, the roads are repaired and *murram* spread on both the approach roads to the great stupa. The autumnal pruning of trees, clearing of grass within the circuit wall and jungle to within 10 feet outside it, the whitewashing of the Museum and necessary repairs to the floor of the building are then carried out. During winter and summer especially the trees and lawns are tended and watered and the site is kept clear of jungle. Grass is cut within the circuit wall on an average half a dozen times a year. During the rainy season the necessary monsoon repairs are carried out. It will thus be seen that all possible effort is made to ensure the safety and proper upkeep of these priceless monuments. *Sanchi.*

" The expenditure incurred in connection with the maintenance and conservation of the Sanchi Museum and site during the year 1922-23 was as follows :—

	Rs.	A.	P.
(1) Pay of Staff	2,614	12	0
(2) Travelling allowance	340	14	0
(3) Contingencies (including mowing and cutting of grass, and watering the trees the year round)	811	12	1
(4) For case of plaster casts	718	13	0
Total ..	4,486	3	1

Bhopal. To this sum of Rs. 4,486-3-1 must be added another sum of Rs. 1,086-7-9 spent on the maintenance of roads and monsoon repairs to the Museum at Sanchi. Thus the total expenditure under this head is Rs. 5,569-10-10.

"The most noteworthy of the new acquisitions to the Museum was a case of plaster casts of antiquities from Sanchi now in the British Museum, which arrived in Sanchi in November 1922. These casts were prepared at the instance of Sir John Marshall on the request of the Darbar. The consignment cost Rs. 718-13-0 which was met from the State Reserve Budget. The following articles were included in it as identified by Sir John Marshall personally in February 1923 when the Director General visited Sanchi during the Viceregal Visit.

List of plaster casts of antiquities received from the British Museum.

"(1) Bowl with lid of black earthenware from Tope II at Bhojpur, *cf.* Cunningham, *The Bhilsa Topes*, page 33 and Plate XXVI, fig. 6.

"(2) Crystal reliquary from inside black earthenware bowl, from Tope IV, Bhojpur, *cf.* Cunningham, *The Bhilsa Topes*, page 333 and Plate XXVI, figs. 6 and 7.

"(3) Inscribed steatite vase found in No. II Tope, Andher. The inscription reads: "*Sapurisasa Mogaliputasa gotiputa atevasino,*" *cf.* Cunningham, *op. cit.*, page 347 and Plate XXIX, figs. 8 and 9.

"(4) Steatite casket from Tope II at Andher, *cf.* Cunningham, *op. cit.*, page 347 and Plate XXIX, figs. 3 and 7 (but the inscription given by Cunningham does not appear on the cast).

"(5) Inscribed steatite casket from Stupa III, Andher, *cf.* Cunningham, *op. cit.*, page 349 and Plate XXX, fig. 6. One inscription on the lid reads: *Sapurisasa Haritiputasa.* Inside the lid is written another inscription: *Asa-Devasa-Danam.*

"(6) Cast of inscribed relic jar of red earthenware from Tope VII, Bhojpur, *cf.* Cunningham, *op. cit.*, page 336, paragraph 14 and Plate XXVII, fig. 5.

"(7) Steatite inscribed box from Stupa II, Sanchi, *cf.* Cunningham, *op. cit.*, page 288, No. III. Plate XX. The inscription outside the lid reads: *Sapurisasa apagrisa.* Inside *Sapurisasa kadimiputasa.*

"(8) Inscribed red earthenware casket from Stupa II, Andher, *cf.* Cunningham, *op. cit.*, page 346, paragraph 7. and Plate XXIX, figs. 5 and 6. The inscription on the outside of the lid reads: *Sapurisasa Vachhiputasa Gotiputasa atevasino.*

"(9) and (10) Casts still unidentified.

"Early in February 1914 sanction was accorded by the Darbar to a grant for the publication of a monograph on the monuments of Sanchi to be written by Sir John Marshall. in collaboration with M. Foucher and published at the joint cost of the Darbar

and the Government of India. The Darbar's contribution was originally estimated at Rs. 16,900, payable in two equal instalments, of which Rs. 8,450 was paid in, the second instalment to be paid later on. But the work was entirely suspended during the great war, since which owing to the rise in prices, the printing charges, etc., have so greatly increased that it has been found necessary for the Bhopal Darbar and the Government of India both to make additional provision if the work is to be carried through. The Government of India have therefore doubled their contribution and the half share of the Bhopal Government is now estimated at Rs. 22,175. Deducting the moiety already paid, the Government of Bhopal has still to pay Rs. 13,725 towards this publication, which amount has now been included in the next Budget for 1931 Fasli for the sanction of Her Highness' Government." **Bhopal.**

Mr. Ghosal further reports a steady increase in the number of visitors to Sanchi. In the year under review these included His Excellency the Viceroy in February 1923 (on which occasion Sir John Marshall was present), Lady Rawlinson accompanied by the Countess Roberts, His Excellency the Governor of Bombay and staff, the Hon'ble the Agent to the Governor General in Central India, and very many others, including 30 Japanese visitors and a large number of American travellers. It is also noticeable that the site is being visited increasingly by school and college students under the guidance of their Professors, Patna College having sent a deputation of this kind during the cold weather of 1922-23 under the guidance of Professor Samaddar, which may be taken as evidence of the widespread interest which these monuments have aroused since their clearance and repair by Sir John Marshall a few years ago.

Gwalior. *Conservation.*

Mr. Garde, the State Superintendent of Archæology, writes as follows :—" The activities of the Department during the year mostly consisted of the completion of works taken in hand last year and the execution of supplementary conservation measures to monuments already under repairs. One new monument was taken up for conservation namely the Gadarmal temple at Badoh, District Bhilsa. Besides conservation works were carried out at the astronomical observatory at Ujjain, the Koshak Mahal at Chanderi, the Hindu monastery at Ranod, the rock-cut caves at Udaygiri, and the Buddhist caves at Bagh.

" The astronomical observatory at Ujjain which is one of the five observatories built by Raja Jayasingh of Jaipur about the middle of the 18th century has been placed by the Gwalior Government at the disposal of the Panditasrama Sabha of Ujjain who have taken upon themselves the mission of the reforming the Indian Calender. The masonry instruments in the observatory were in a dilapidated and unsafe condition and had lost their graduation marks. The masonry has now been thoroughly repaired and the necessary graduations accurately marked on slabs of Jaipur marble have been fixed and thus the instruments have been restored to perfect order for astronomical observations. The proper diversion of the neighbouring ravines, which are threatening the monument, requires attention in the near future. The work was carried out under the expert supervision of Pandit Gokulchandji Bhawan of Jaipur, who has had some experience of this sort of work in repairing similar observatories at Jaipur and Benares.

" Koshak Mahal :—The main repairs to this building had already been carried out last year. Some supplementary measures to remedy the defects exposed to view after the clearance of jungle and débris were executed this year. The large mass of carved and

Gwalior. dressed stones found in the débris was arranged into a sort of enclosure wall round the building.

"The Hindu monastery at Ranod popularly known as Khokhai:—A description of this building appears in Cunningham's Archæological Reports, Vol. II, pp. 304 ff. General Cunningham called it a Hindu palace. But from the long inscription (Epigraphia Indica, Vol. I, pp. 351 ff) recorded on it we know that it is in fact a Saiva monastery, one of a group built in this part of the country by a line of Saiva ascetics in the 9th-10th centuries—other specimens existing at Surwaya, Terahi, Kadwaha and Kundalpur in Gwalior State and in two other places in Central India. The monastery was briefly referred to in the last Annual Report as the conservation work was commenced about the end of the last financial year. One instalment of the repairs which has been completed this year includes the freeing the monument from jungle and *kachha* structures added to it in later times, exposing the original stone floors from silt and rubbish and providing proper drainage for rain water, supporting the beams and ceiling slabs, that had cracked, on steel rails passed horizontally underneath them, repairs to the roof, etc. An old square tank contemporary with the monastery was cleared up and petty repairs were done to the *ghats* which surround it on all sides.

"Udaygiri caves:—It was recorded last year that in response to our request the Director General of Archæology in India had deputed the Archæological Chemist to inspect some of the sculptures and inscriptions on these caves, which were in danger as the rock on which they are carved is decaying and the surfaces peeling off, and to recommend some chemical treatment to prevent or arrest the decay. His recommendations being accepted he came again to the place in March last and personally carried out the cleaning, stuffing and the necessary chemical treatment of three valuable inscriptions of the 5th century which were in need of preservation. He has done the work with great skill and care and it is hoped that the treatment will serve to prolong the life of these records for a very considerable time. I was able to watch the operations and hope to be able myself to carry out similar treatment on some of the sculptures which stand in need of it. The Chemist has promised to supply us with the chemical mixture for the treatment.

"Frescoes on the Buddhist caves at Bagh:—These frescoes have suffered very badly and only a very small portion of what originally existed now survives. But on this very account the importance of what little remains has increased in inverse proportion. The Archæological Chemist was therefore invited to examine the frescoes and to advise us in the matter of their preservation. He recommended that the edges of plaster which bear the paintings should have a fillet run round them, filling up of the small gaps and treatment of the surface with a wash of bees wax in terpentine, after careful dusting. Apart from having a cleaning effect the wax treatment is calculated to make the paintings waterproof. During the year we obtained on loan the services of the Chemical Scholar under the Director General of Archæology who has had special training in this type of work, to execute the measures recommended. He worked at the frescoes for about a month in February and March and conserved about half the painted surface on the façade of cave No. 4. My General Assistant assisted the Chemical Scholar during these operations and has picked up sufficient knowledge to be able to do the remaining work next season. The work of freeing the surviving caves from their own débris, with which they have been choked, has been in progress for the last two years. During the year of report part of cave No. 3 and the north-east end of the verandah of cave No. 4 were cleared up.

" Gadarmal temple at Badoh, District Bhilsa :—Badoh, which is now but a petty village, possesses extensive ruins of temples both Hindu and Jaina dating from the 8th to the 12th centuries. The most important of these remains is the Gadarmal temple which as it now stands consists of two distinct parts—the basement, which is a remnant of the original magnificient temple of about the 9th century and the spire, which is composed of a heterogenous collection of pieces, evidently a later repair. The temple stands on a spacious platform and is surrounded by seven attendant shrines which are all in ruins. There was originally a fine carved *torana* gateway over the stepped entrance to the platform and this monument stood in a large enclosure. Traces of the enclosure wall and its gateway still exist. A glowing and rather exaggerated description of this temple having reached Sir John Marshall he visited it in 1913 and forwarded a conservation note on it to the Gwalior Government. The conservation measures carried out this year include among others those recommended by Sir John. The chief items comprised the removal of the vast amount of stone débris with which the monument was literally choked on all sides dismantling and rebuilding of a whole rib of the *sikhara* which had buckled forward, closing gaps and fissures in the spire, casual repairs to the stone pavements in the shrine, porch and paltform and supporting some broken beams on iron rails. One pillar of the *torana* gateway was already standing, the other pillar which had fallen was re-erected in its original position. The work still in progress at the end of the year. **Gwalior.**

" Trial excavations on a small scale were made this year at Mandasor—the ancient Dashapura which was a prosperous town in the 5th-6th centuries A. D. and possesses numerous relics of that period. The excavations were undertaken primarily as a measure preliminary to conservation of some of the monuments and secondly with a view to tapping the ground for more antiquities. The excavations round about the famous inscribed pillars of Yasodharman at Sondni near Mandasor, an accurate description of which appears in Fleet's Gupta Inscriptions, pp. 143 ff., disclosed the orginal foundations of the pillars at a depth of only 1½ feet below the present ground level thus showing that the columns are lying on their original site. A double faced human head was found in the excavations near the lion capital of pillar A, which clears the uncertainty regarding the nature of the figure which crowned each of these columns and clearly indicates that it was a double human figure with two faces looking in opposite directions (*cf.* Buddhagupta's pillar at Eran). About 75 feet to the west of the foundations of the columns is a low mound from which were exposed the foundations of a large brick building which judging from the stump of a huge *Sahasra Linga* found lying half buried in the mound, would appear to have been a temple of Siva. The two life size stone images of Dvarapalas now lying prostrate on the site probably flanked the entrance to this temple. As the ground levels of the monolithic columns and of this temple are very nearly the same it is likely that the columns and the temple are contemporary with each other (the middle of the 6th century A. D.). And again as both the known inscriptions of Yasodharman open with invocations, addressed to Siva there is every reason to believe that he was a devotee of Siva and may, therefore, be presumabled that the brick temple of Siva, the foundations of which have been unearthed in the excavations, was also a work of the same prince. *Excavation.*

" Excavations made near a beautifully carved *torana* pillar of the 5th or 6th century which stood half buried in ground at Khilchipura near Mandasor, exposed its whole length and its original foundations about 12 feet below the present ground level. It is obviously one of the two uprights of a *torana* gateway standing *in situ*. Its companion

Gwalior.

pillar has long been removed from the site, in fact a portion of a similar pillar was found built into a wall of the Muhammadan fort at Mandasor. The foundations of a brick building to which this gateway apparently belonged were also unearthed in the excavations. The two broader faces of the pillar bear figure sculpture in panels while the two narrower faces are ornamented with decorative patterns. There are in all eight figure panels, four on each of the two broader faces of the pillar. The lowest panel on one face shows the river goddess Yamuna and that on the other a dvarapala with a third eye—a characteristic of Siva—on the forehead. In each of the remaining six panels are repeated the same three figures—a man, a woman and a boy or a dwarf in different attitudes. The scenes appear to be a pictorial representation of some mythological story—probably a Saiva one—which has so far baffled identification. The brick building, to which the *torana* was related was very probably a Saiva temple.

"At the south eastern corner of the Mandasor fort is standing a fine sculpture in the Gupta style half buried in the ground. Excavations carried out round the sculpture exposed at a depth of 16 feet below the present ground level. A stone floor which probably marks the ground level of the original Gupta temple, to which the sculpture evidently belonged. A stone pedestal made of two odd pieces of stone and a wall of rough stone masonry, into which the sculpture was built, reveal an attempt made in later (mediæval) times to re-erect the mutilated sculpture and shelter it in a roughly built shrine. The sculpture is a colossal image of Siva standing surrounded by his *ganas*. On the pedestal is carved the scene of *Tandava* Siva's peculiar dance to the accompaniment of music played by his *ganas*. The sculpture which is 12′ 6″ high with its well proportioned form, easy and natural posture ranks as a notable specimen of Gupta art.

"In all these excavations only few lower courses of walls and the floors of buildings were found to survive, the superstructures and their débris having totally disappeared. The excavations were also strikingly barren of small antiquities. The explanation for this appears to be that these monuments have not died a natural death but were thoroughly exploited for building material when the fort was constructed at Mandasor during the Muhammadan régime. The masonry of the fort amply bears out this surmise.

Listing of Monuments.

"In all 61 individual monuments were listed during the year. They are distributed over 25 different places in the Narwar, Esagarh, Mandasor, Ujjain and Gwalior Gird Districts and comprise ancient sites, temples, monasteries, memorial pillars, Sati stones, loose sculptures and inscriptions, etc.

"The site of an ancient town was discovered at Morwan (Sk. Mayuravana) about 15 miles north of Neemuch, District Mandasor. A stone head of the Sunga period picked up on the site, traces of brick walling, which are found under ground when foundation pits are excavated, and some ruins of shrines going back to the Gupta period, mark it as an ancient site. Further investigation is, however, necessary before anything more can be said regarding this site. Numerous ruins of Hindu temples and a Hindu monastery of about the 10th century were discovered at Kundalpur, District Narwar. Similarly a number of sculptures lying loose in the ruins of Mediæval Hindu temples were found at Kota in the same District. Many of these sculptures are worth preserving in the Museum.

"In all forty-five inscriptions were discovered in the year. Of these 25 are in Sanskrit, 1 in Sanskrit-Prakrit, 11 in Hindi, 6 in Persian and 2 are illegible. Classified according to royal dynasties one of the inscriptions is Gupta, four refer themselves to the Jajapellas of Narwar, one to the Tuglaqs and seven to the Mughals of Delhi, two to the Khilji Sultans of Mandu while in the rest no king is mentioned. Gwalior.

"The earliest epigraphical find of the year was a fragment of a stone inscription found at Mandasor, a greater portion of which had already been discovered at the same place and has been published in the Epigraphia Indica, Vol. XII, pp. 315 ff. The present fragment appears to be a direct continuation of the published portion and in the first line records the *Gargayana gotra* of the donor (?) and the second line probably mentions Dasapura (Mandasor). Next in date but foremost in importance is a stone inscription, also found at Mandasor, recording the construction of a well endowed with a *stups*, a garden and a *prapa* (water stall) by Dattabhata, Commander-in-Chief of the forces of king Prabhakara, in Malava Samvat 524 (=467-68 A. D.). The inscription mentions the early Gupta Emperor Chandragupta II and his younger son Govindagupta, Dattabhata the donor being a son of the Govindagupta's General (*Senadhipa*) Vayurakshita. This is the first inscription found at Mandasor recording the existence of Buddhist monuments on that ancient site, which had hitherto yielded only Brahmanical sculptures and inscriptions.

"A single line of inscription, unknown before, engraved in Gupta characters on the lion capital of Yasodharman's pillar B was exposed in the excavations. I have as yet been unable to decipher with certainty all the letters of this record, but a tentative reading that can be proposed at present is 'Dharmmah Ni (ddo) shah.'

"A fragment of an inscribed slab was found lying in a street in the town of Bhilsa. The language of the inscription is partly Sanskrit and partly Prakrit, characters being of the 9th-10th century A. D. Only the central portion of the original slab broken vertically in not less than three pieces has been recovered. It seems to record a hymn (*stotra*) in praise of Bhaillasvamin, the sun god after whom Bhilsa takes its name.

"Another inscription of historical importance discovered during the year was a *Prasasti* in 29 Sanskrit verses, which records the construction of a well at village Vitapatra (modern Budhi Badod) by Devadhara, a Rajput of the Gandhara family and chief Minister of Asalladeva in (Vikrama) Samvat 1336 (=1279-80 A. D.) when Gopaladeva, son of Asalladeva was ruling at Narwar. The poet who composed the *Prasasti* was Srisiva, a resident of Gopadri (Gwalior). The stone was lying on a hill near the village of Barodi (District Narwar). Still another find was a Persian inscription found near an old tank at Chanderi. It records the construction of a reservoir of water (evidently the tank near which it was discovered) in A. H. 918 (=1512 A. D.) during the reign of Mahmud Shah Khalji of Malwa.

"The Archæological Museum established last year at Gujari Mahal, Gwalior Fort, is making a steady progress and during the year of report 257 coins, 7 stone inscriptions and 43 sculptures were acquired for the Museum. Among the more valuable acquisitions of the Gupta inscription dated Samvat 524 from Mandasor, the huge Lion Capital of the Gupta period from Udaygiri (District Bhilsa), the sculpture of Parvati from Gyarlspur, the image of Buddha from Kota (District Narwar), the Sanskrit inscription dated Samvat 1336 from Barodi (District Narwar) and the Persian inscription dated A. H. 918 from Chanderi deserve special mention." *Archæological Museum.*

SECTION X.

Departmental Routine Notes.

1. ANCIENT MONUMENTS PRESERVATION ACT AND LISTING OF MONUMENTS.

On page 126 of the Report for 1921-22, I referred to the necessity under which we are placed by the Reforms of overhauling the lists of protected monuments in the several Provinces of India. During 1922-23 this work was continued and lists were brought up to date for the United Provinces, Bihar and Orissa, Bengal, Assam, and the Punjab, so far as Hindu and Buddhist monuments are concerned. The Director General's scrutiny of the remaining lists could not be completed this official year chiefly for the reason that the materials were requisitioned in connection with Lord Inchcape's Committee and were not received back in this office in time to permit of final revision before the close of the year.

United Provinces

Mr. Blakiston reports that the five gateways in the interior of the Tajganj Mahalla at Agra have been declared protected. In the year 1920 one of these gates was protected but the notification omitted to give its name, so that by the substitution of the word "gateways" for "gateway" all have now been brought under the operation of the Act. Notifications of protection have been withdrawn from two monuments in the United Provinces, *e.g.*, a mosque at Orai in the Jalaun District and a tomb and gateway in Pihani in the Hardoi District.

Delhi Province.

At Delhi the Punjabi gateway of the Roshanara Bagh was notified as a protected monument. In connection with the monuments at Delhi it may be noted that the third and fourth volumes of the list of Muhammadan and Hindu monuments in that Province have now been printed and issued. These volumes deal with the monuments in the Mahrauli, Badarpur, Badli, Nangloi, Bawana, Kanjhola, Najafgarh, Palam, and Shahdara Zails and bring the series to completion.

Punjab.

In the Punjab ten monuments were protected on the advice of the Superintendent, Muhammadan and British Monuments, including seven Kos Minars in the Jullundur District, and three protection notifications were recommended by the Superintendent, Hindu and Buddhist Monuments, these three being in respect of (*a*) a ruined stupa at Katas in the Jhelum District, (*b*) Murti, a small isolated hill in the Gandhala Nala near Choa Saidan Shah in tehsil Pind Dadan Khan, and (*c*) two ancient temples in the ruined fort at Baghanwala, some eleven miles from Haranpur Railway Station.

North-West Frontier Province.

Mr. Hargreaves reports only one monument, the stupa of Zaro Dehri, as having been brought under the operation of the Ancient Monuments Act in his Circle. He also states that the list of monuments in the Frontier Province has been prepared but has yet to be printed. Owing to the discovery of men in the act of removing stones from a protected though privately owned excavated area at Taxila, and to some wilful damage caused to sculptures at Jaulian, it was decided to purchase five sites, namely, those at Tofkian, Jandial, Jaulian, Lalchak and Badalpur in order, if possible, to put a stop to such occurrances for the future. For these sites a sum of Rs. 3,428 had to be paid.

"In all thirteen monuments were declared protected in the Bombay Presidency," writes the Officiating Archæological Superintendent, "of which eight were confirmed as such, while agreements were entered into in respect of Sikandar Shah's tomb at Halol in the Panch Mahal's District, Afzal Khan's Cenotaph at Bijapur and the small Dargah near Habshi in the Poona District." **Bombay.**

Five excavation sites in the Patna District of Bihar were confirmed as protected, and for certain ancient monuments at Nalanda, a preliminary notification was issued. In regard to the listing of monuments in this Province, Mr. Page writes: "During the year under review work was continued on the listing of ancient monuments protected under the Ancient Monuments Preservation Act, VII of 1904, in the Bihar and Orissa Province; and the list for the Orissa Division was finished and has been duly approved by the Local Government. The Bhagalpur and Chota Nagpur Divisions of the Province were then taken up, and it is anticipated that these divisional lists will be completed early in the coming year. The listing of the monuments in the Patna Division is also well in hand and is expected to be finished shortly. The lists contain a summarised account of the history of each of the protected monuments in the Province, as well as a record of such inscriptions and epigraphs as they bear, and a brief descriptive note on their architectural and other features. A fairly complete bibliography is also included. The volume will be illustrated with small inset photographic reproductions of the more important of the monuments; and it has been decided to make it available to the public. It is hoped that the lists will be finally printed off and ready for issue before the end of the ensuing year." **Bihar and Orissa.**

As mentioned in the previous year's report, the preparation of the original sheets of the five divisional maps of the Bihar and Orissa Province illustrating the sites of the principal archæological remains was completed in 1922; but the maps have not yet been printed off. The Local Government is, however, in communication with the Bihar and Orissa Drawing Office, Gulzarbagh, on the subject of their reproduction, and it is hoped that they will be available for issue before long. The alphabetical lists of the ancient sites indicated in these maps are now complete; and a comprehensive bibliography relative to them is in course of preparation. These will be published as a supplement to the maps.

Regarding the working of the Ancient Monuments Preservation Act in Bengal, the Superintendent says: "Two monuments were added to the list of protected monuments in Bengal. One of these was the Bharat Bhayna stupa mound in Jessore District and the other the mound to the north of the village of Bhadisvar in Birbhum District. Besides these, excavation was prohibited within the mound area at Jagdal in the Dinajpur District, under Section 20 of the Act. The two inscribed miniature pillars at Paikore in the Birbhum District, which are of historical interest, have been brought under the provisions of Section 18 of the Act to prevent their removal from the place where they are lying. The Diwankhana of Mir Jafar at Murshidabad, which was hitherto maintained as a protected monument, has now been abandoned as the building is not of sufficient archæological interest. The notification in respect of the Alwal Mosque at Fatehpur in the Chittagong District, which is a modern thatched building though possessing older walls, has now been cancelled, except in so far as it applies to the stone **Bengal.**

inscription fixed in the wall recording the construction of a mosque there in the 15th century, the oldest record of the Muhammadan occupation in those parts.

Assam. "In Assam, the group of monoliths at Kasomaripathar which are similar to the well-known Dimapur monoliths were notified during the year as protected monuments under the Act."

Madras. Mr. Longhurst writes: "In regard to the listing of monuments in the Madras Presidency, a new preliminary 'List of Protected Monuments in the Madras Presidency' has already been submitted to the Director General of Archæology and the final list is now under preparation. Owing to want of information required from the Civil authorities regarding the ownership of certain monuments, and the proposed deletion of others owing to lack of funds for their annual maintenance, I do not think the new list will be ready for the Press until 1924."

Burma. Mon. Duroiselle, the Archæological Superintendent in Burma, reports as follows:—"No new monument was added to the list during 1922-23. Two buildings, the Thamidaw and Medaw Kyaungs, which are known as the Sangyaung Monastery at Amararura, and which were brought on the list in 1904-05, have now been removed, as it is considered that their retention thereon will not be justified owing to their dilapidated condition. A report on these buildings, with many illustrations, was published in the Annual Report of the Director General of Archæology in India, 1914-15, Part II, pages 56-65."

Rajputana and Central India. The Assistant Superintendent, Maulvi Zafar Hasan, in charge under the Director General of Archæological works in Rajputana and Central India, made a tour through a number of the States in order to inspect and advise on the ancient monuments which the Darbars propose to preserve, and to prepare lists of them. He was able to inspect 40 monuments in all, *viz.*, 12 in Alwar, 5 in Dholpur, 11 in Jhalawar and 12 in Rewa State.

2. PUBLICATIONS.

The progress made this year with the publication of the *Epigraphia Indica* and the *Epigraphia Birmanica*, and the reason for my having no data in regard to the *Epigraphia Indo-Moslemica* have been given under the head of Epigraphy in Section III above. There are no provincial Reports to record now owing to the substitution of the one consolidated Report for the whole department, except in the case of the Archæological Superintendent in Burma and the Assistant Superintendent for Epigraphy, Southern Circle, Madras, who continue to issue separate Reports, sending to the consolidated Report only summaries of their work. In 1922-23 M. Duroiselle issued the provincial Report for Burma in due course and also a List of European Burial Grounds in Burma giving inscriptions on tombs anterior to 1st January 1858, the oldest one recorded being at Mergui dated 1682. In addition to these the usual number of conservation notes was issued by the several Circles, details of which need not be given here; and various Memoirs were submitted to the Director General which are either in process of editing or

have been sent to Press. The list of works actually in the Press on the 31st March 1923 was a fairly long one, and included the following :—

1. Annual Report of the Director General of Archæology in India for 1920-21, by Sir John Marshall.
2. Index to the Annual Reports of the Director General of Archæology in India, 1902-16, by Mr. G. R. Kaye.
3. A volume of the Imperial Series on the Bakshali Manuscript, by Mr. G. R. Kaye.
4. A volume of the Imperial Series on the Antiquities of Sind, by Mr. Henry Cousens.
5. A volume of the Imperial Series on the Chalukyan Architecture of the Kanarese Districts, by Mr. Henry Cousens.
6. A volume of the Imperial Series on Somanatha and other Mediæval Temples in Kathiawad, by Mr. Henry Cousens.
7. A Memoir on Kannada Poets, by Mr. T. T. Sharman.
8. A Memoir on Hindu Astronomy, by Mr. G. R. Kaye.
9. A Memoir on the Temple of Siva at Bhumara, by Mr. R. D. Banerji.
10. A Memoir on the Antiquities of Bhimber and Rajauri, by Mr. Ramchandra Kak.
11. A Guide to Sarnath (revised edition), by Rai Bahadur Daya Ram Sahni.
12. An Urdu Translation of Sir John Marshall's Guide to Taxila, by Mr. Hamid Kuraishi.
13. A Supplementary Catalogue of the pre-Muhammadan Coins in the Indian Museum, Calcutta, by Pandit B. B. Bidyabinod.
14. Conservation Manual, by Sir John Marshall.

3. PHOTOGRAPHS.

Northern Circle.

The work of filling the gaps in the photograph albums of the Agra office was continued, and in order to prevent further removal of prints from the albums (a bad habit that had been in vogue for some years), a commencement has been made to paste them therein permanently. The total number of new photographs taken was 224, including 142 of the specimens of calligraphy, manuscripts, farmans, paintings, and other exhibits of the Delhi Museum of Archæology. Nine photographs of Sher Shah's Gate and Khair-ul-Manazil at Delhi were prepared while repairs were in execution to these buildings. Thirteen plates were exposed at the Taj Mahal and Sikandra and 59 on the old buildings at Jaunpur, Etawah, Badaun, Benares and Multan.

In the office of the Superintendent, Hindu and Buddhist Monuments, 106 fresh negatives have been prepared. They include photographs of the excavations carried out at Kurukshetra and Bilsar, 19 negatives of sculptures at Mathura, received from the office of the Superintendent, Muhammadan and British Monuments, in exchange for certain photographs of Muhammadan Monuments at Multan which had been prepared for the use of the Director General of Archæology, and a number of photographs taken in the Kangra District. Seventy-eight photographic prints were supplied gratis

Northern Circle. to officers of the Survey, and forty-two were sold to the public on payment. Owing to lack of funds it was not found possible to replace the 293 prints which from time to time have been taken out of the albums for publication or for supply to the public, but next year care will be taken to fill these gaps.

Frontier Circle. One hundred and thirty-two negatives were prepared in the Peshawar office, 82 being of the estampages of the Asoka Rock Edicts at Mansehra and Shahbazgarhi. To obtain the clearest and largest reproduction possible of these estampages, application was made to the Director General of Archæology for the loan of a 12 × 10 camera, and not only was this obtained but also the services of his photographer, who made 82 excellent negatives. Eighty-seven photographic prints were sold to private persons, the money realized, Rs. 36-8-0 being credited to Government. The office albums of photographs are up-to-date and the negatives generally in excellent condition.

Western Circle. In the Western Circle two sets of negatives were prepared, *viz.*, 246 illustrative of the usual activities of the office, and 228 required chiefly for the purposes of illustrations to Mr. R. D. Banerji's three Memoirs which he has submitted to the Director General for publication. Of the former 166 were exposed in Bombay and 80 in Sindh.

Central Circle. A brief note summarising the extent of the collection of photographs existing in the office of the Archæological Superintendent, Central Circle, appears in the Archæological Report for the previous year. During the year under review this collection was augmented by photographs of the Faruqi monuments at Burhanpur and Asirgarh in Khandesh; the early Mughal remains at Khimlassa in the Saugor District; the walls and gates of the Gond fortifications at Chanda; and the remains of the city wall at Akola, dating from the reign of Aurangzeb, all in the Central Provinces; while, in the Province of Bihar and Orissa, photographs were taken of the early 17th century Chero Forts at Palamau, which are almost obliterated by the dense jungle of the locality, of the 14th century tomb of Malik Ibrahim Bayu on the rock of Bihar, as well as the meagre ruins of the walls of Bihar Fort, which appear to date from Imperial Gupta times; of the ancient remains at Rajgir, which date back to the beginnings of the historical period in India: of the caves excavated by Asoka in the Barabar Hills at Gaya, in the 3rd century B. C., for the Ajivikas; and of the neighbouring caves at Nagarjuni cut by his grandson Dasaratha for the use of the same sect: of the early Buddhist sites at Hasra Kol and the Sobnath Hill adjacent, which latter has been identified with the Kakkutapada Hill of the Chinese pilgrims where Kasyapa the contemporary disciple of Buddha lies buried; of the excavations in progress at Nalanda, assignable to the later Guptas and the Palas; of the 16th century mosques, shrines and palaces in the Fort at Rohtas: of Shershah's fortress at Shergarh: his tomb, and that of his father Hasan Sur at Sassaram, as well as the tomb of his architect Aliwal Khan, and the ruins of Salim Shah's monument in the same locality. The shattered jungle-grown remains of the Early Mughal mosque at Hadaf (Rajmahal in the Santal Parganas were also photographed, along with the later Mughal bridge in the vicinity: and, again the Gates of the Fort of Monghyr, which appear to date from Early Mughal times, when the walls were under repair.

The office photograph albums are substantially complete and steps are being taken to replace old faded prints in the collection.

The collection of photo-negatives in the Eastern Circle was enriched by a further addition of 209 negatives taken during the year. The new series started since the re-organization of the Circle three years ago now numbers 466, while there are 551 negatives of the old Eastern Circle series. The printed list of negatives of the old Eastern Circle published in 1919 is now somewhat out of date so far as Bengal and Assam are concerned, and it will be necessary before long to issue another list embracing the collection stored at the Calcutta office. The present year's collection from Bengal includes a set of 49 photographs of the monuments at Gaur and Panduah, 10 plates exposed at Tribeni and Panduah in Hooghly District which were taken at the instance of the Director General, 35 views of the excavation at Paharpur undertaken during the year, some illustrations of the conservation work executed at Vishnupur and Bahulara in the Bankura District, and some records of the collection of sculptures made by the Archæological Society at Rangpur and by a private artist for his studio at Mahesvarpasa in the Khulna District. Among the photographs obtained in Assam mention may be made of those taken of the sculptured stones lately arranged in the Municipal park at Tezpur: of the re-discovered Copper Temple near Sadiya in the extreme north-east of Assam, and some of the palaces, temples and old cannon at Sibsagar and of the monoliths at Dimapur. Albums were made for preserving the photographic prints in the office and gaps existing in the collection are being filled up. **Eastern Circle.**

The number of photographic negatives stored in specially constructed negative cabinets amounts to 2,385. These are all full plate (size 6″ × 8″). "Formerly" says Mr. Longhurst, the Superintendent, "photographs of all sizes were taken in this Circle but this want of uniformity gave unnecessary trouble in storing the negatives and keeping up the office albums so a standard size was introduced soon after I took over charge of the office, and a printed classified list of all full plate negatives was published in 1919. Since then a number of new negatives have been prepared and a list of the same was published every year in the Provincial Annual Report, but it will now be necessary to issue a printed supplement to the old list of 1919 showing the new negatives added to the collection since that date. The photographic albums numbering 30 and having the same classification as the negatives are kept up to date and in good order and are open to public inspection. During the year under report, seven applications for photographs were received from the public and 36 photo-prints were supplied at a cost of Rs. 37-10-0, which amount has been remitted to the local treasury. The Director General of Archæology was supplied with 55 prints and Father Hosten of St. Joseph's College at Darjeeling with 116 prints. The late Head Photographer retired in January last after 37 years' service and at present there are only two photographers attached to my establishment." **Southern Circle.**

Sixty-seven photographs were taken in the Burma Circle and of these a series of the fresco paintings at Pagan were perhaps the most interesting. A casket together with a small Buddha enshrined within it, which were found at Pagan, were also photographed. "They are of wood covered over with lacquer-ware and belong" says Mons. Duroiselle, "to the 12th-13th century and are so far as it has been possible to ascertain the earliest evidences of lacquer-ware at Pagan or anywhere in Burma." **Burma Circle.**

The office of the Director General of Archæology prepared 219 photo-negatives during the year. Prints of all photographs taken under the direction of the Circle *Director General's office.*

Officers were as usual duly received and mounted according to localities in the albums in the Central Library.

Indian Museum. The photographer of the Archæological Section, Indian Museum, prepared 227 photographic negatives during the year. These include an almost complete set of fresh negatives of the bas-reliefs of Bharhut and of a considerable number of mediæval sculptures in the Gupta Gallery. The section has received photographs from the office of the Archæological Survey, Burma Circle, for the year 1921-22; from the Northern Circle, Agra, for 1921-22; from the Director General of Archæology in India for the years 1920-21 and 1921-22; and from the Frontier Circle for the years 1920-21 and 1921-22.

4. DRAWINGS.

Northern Circle. *Agra.* The Head draftsman was again engaged on the survey of the Delhi Monuments with the four temporary draftsmen, and the total number of new drawings including those of the Delhi Monuments prepared during the year was fourteen. Amongst these may be mentioned working drawings executed by the Assistant draftsman of the proposed show cases of the Delhi Museum, designs for proposed new gateways at Sikandra, Agra, and an iron gateway or grill for the Gulab Bari at Fyzabad; plans of the lay out of the gardens of Itmaduddaula, Agra, and a part plan of the Lahore Fort showing buildings required by the Archæological Department. In addition to these, tracings were made of all the drawings received from the Public Works Department. The temporary draftsmen were mainly employed at Humayun's tomb of which they prepared five sheets of drawings. They also inked in and completed no less than twenty-four drawings of the Kotla Firozshah and of the Hauz Khass Monuments.

Lahore. The two draftsmen in the Lahore office prepared eight new drawings and inked in several pencil drawings made in the previous years. The plan of the excavations at Sarnath, which was originally prepared in the office of the Director General of Archæology was redrawn and brought up to date by including the excavations carried out at that site up to the year 1922. This completed plan is being published in the revised *Guide to the Buddhist Ruins at Sarnath.* At the request of the Superintendent the Executive Engineer, Ambala Provincial Division, was good enough to have an accurate survey plan of the mound known as Raja Karn ka Killa prepared by an experienced surveyor. This was necessary as the mound is about 40 feet high and a plan could not be set out correctly without the use of a theodolite.

Frontier Circle. In the Frontier Circle, the draftsman, besides making drawings required in connection with the protection and acquisition of sites, and to illustrate the Annual Report and Conservation Notes, continued the preparation of two large scale plans of the Jamalgarhi site. He was also employed in making estampages of the Mansehra and Shahbazgarhi inscriptions and 'keys' to these, and from the middle of November up to March was in charge of the conservation work carried out departmentally at Jamalgarhi.

Western Circle. The Superintendent reports that during the year seven drawings were put in hand, and these consisted of plans of the Shahibagh at Ahmedabad, of the caves at Badami

and of two Buddhist stupas and one monastery at Mohen-jo-daro, but all are still in an unfinished condition. Of the ten drawings left in progress during the last year two were finished. In addition to these drawings the draftsmen were engaged in taking estampages of inscriptions and sacred symbols from the Padan Hill, in the Thana District, with a view to keeping them on record as the hill is being fast quarried away by the Development Department. **Western Circle.**

Among the monuments of which survey drawings were made during the year were the monastic remains at Nalanda, where plans were prepared of the newly opened sites designated Monasteries No. IB, 4 and 5 ; and a sectional record was made of trial pits sunk some 12′ below the lowest stratum disclosed in Monastery No. I, in the hope that possible recovery of still earlier levels of occupation might be made ; though none came to light. In Orissa, plans were made of the Rani Gumpha and Lalatendu Kesari caves at Khandagiri, and a number of the sacred symbols in the neighbouring Ananta Gumpha cave, which could not be satisfactorily photographed, were sketched. Drawings were also made of the Atharanulla bridge at Puri, with its characteristically Hindu system of corbel construction spanning the spaces between the piers. **Central Circle.**

The collection of drawings in the office of the Eastern Circle mainly consists of plans of the more typical monuments in the Province of Bengal, besides four survey plans of sites of archæological importance. This year's additions were seven in number and include plans of the ancient site and excavated buildings at Paharpur in the District of Rajshahi, a survey plan of the mounds at Jagadal the site of the well-known Jagadal monastery, and plans of the Sidhesvara temple enclosure at Bahulara, now under repair, and of two mosques in the Dacca District which it is proposed to conserve in the near future. Besides these, several working plans and tracings were prepared in connection with conservation work. **Eastern Circle.**

Only a few small plans to serve as illustrations to Mr. Longhurst's special work on "*Pallava Architecture*" and a few tracings for office use were made during the year. The collection of drawings now in the office of the Southern Circle is a large one and numbers about 1,250. The most important of these have been carefully classified and stored in a specially constructed drawing-cabinet and a printed list of them was published in 1914. **Southern Circle.**

Seventeen drawings were added to the Burma office collection during the year. A list of them will be found in the Superintendent's Annual Report for 1922-23, which continues to appear as a separate publication. The drawings executed consist of plans and sections of certain monuments at Mandalay and Pagan and details of two old pieces of carving recently discovered at the latter place. **Burma Circle.**

In the office of the Director General of Archæology eleven drawings were prepared, of which six related to the excavations at Taxila and the remaining five to the Jami Masjid at Srinagar in Kashmir. *Director General's office.*

5. PERSONNEL.

With the exception of the officers noted below all the officers of the Department continued to hold their respective appointments as in the previous year.

Mr. A. H. Longhurst, Superintendent of the Southern Circle, was granted leave out of India for 12 months with effect from the 1st of April 1922 and Mr. Hirananda Sastri, who was confirmed later as Superintendent for Epigraphy, was appointed to officiate during his absence while Mr. K. V. Subramanya Aiyar, Assistant Superintendent for Epigraphy, officiated for the latter.

Rao Bahadur H. Krishna Sastri, Government Epigraphist, was granted 2 months' leave from 5th June 1922 and Mr. K. V. Subrahmanya Aiyar, Officiating Superintendent for Epigraphy, held charge of his office in addition to his own duties.

Mr. G. Venkoba Rao, Assistant Superintendent for Epigraphy in the Southern Circle, was absent on leave for about three months from the 8th of August, Mr. K. V. Subrahmanya Aiyar holding charge of his office in the meantime, while Mr. Y. R. Gupte, Custodian of the Elephanta Caves, was appointed to officiate for him.

Maulvi Muhammad Hamid Kuraishi, Assistant Superintendent in the Central Circle, was on leave for three months from May 1922, and Pandit Madho Sarup Vats, Sanskrit Scholar in the office of the Director General, officiated for him.

Mons. Duroiselle, Archæological Superintendent in Burma, was on eight months' leave in 1922 and during his absence his Archæological Assistant held charge of the current duties of his office in addition to his own work.

Pandits Hirananda Sastri and K. N. Dikshit were confirmed in the respective appointments of Superintendent for Epigraphy and Superintendent, Archæological Survey, while Mr. G. C. Chandra and Maulvi Muhammad Hamid Kuraishi were confirmed as Assistant Superintendents, Archæological Survey, all four with effect from the 8th September 1922.

The Sanskrit scholarship for training in Archæology held by Mr. Madho Swarup Vats, M.A., was extended for a period of one year, and that for training in Archæological Chemistry was also extended for another year and continued to be held by Mr. Ram Singh Ahuja. The Architectural scholarship was extended again and Mr. Maung Hla Thwin remained at work under the supervision of the Consulting Architect to the Government of Bombay. Mr. M. W. Kyni Pu, B.A., continued to hold the Burma scholarship.

It should be noted in conclusion to explain the fact of this Report being edited by the undersigned, that although Sir John Marshall, Director General of Archæology in India, was present throughout 1922-23, he proceeded on long leave out of India in the middle of April. This Report being due to Government at a date too early to permit of Sir John Marshall's dealing with it on his return, its publication has devolved upon the undersigned and Mr. J. F. Blakiston, the Officiating Deputy Director General.

BRAINERD SPOONER,

Offg. *Director General of Archæology.*

Simla, 15th November 1923.

APPENDIX A.

Expenditure.

Director General of Archæology in India including Epigraphist for Moslem Inscriptions.

Heads.	Allotments.			Expenditure.		
	Rs.	A.	P.	Rs.	A.	P.
1. ESTABLISHMENT—						
Salaries of officers	66,000	0	0	55,623	5	0
Salary of establishment	48,108	0	0	(a) 50,141	4	0
Archæological scholarship	5,520	0	0	2,564	5	0
Total	1,19,628	0	0	1,08,328	14	0
2. CONSERVATION	..			..		
3. EXCAVATION AT TAXILA	5,000	0	0	2,846	7	0
4. MUSEUMS AND BUNGALOWS	*Nil.*			*Nil.*		
5. PUBLICATIONS—						
Annual Report	5,000	0	0	1,323	0	0
Other Archæological publications	2,500	0	0	(b) 2,920	9	6
Sanchi Monograph	10,000	0	0	862	12	9
6. PURCHASE OF PHOTOS AND PHOTO MATERIALS	3,320	0	0	4,299	2	0
7. LIBRARY	3,200	0	0	3,103	1	8
8. OFFICE CONTINGENCIES	21,184	0	0	15,877	15	6
9. ALLOWANCES—						
Grain compensation allowance	310	0	0	317	12	0
Travelling allowance of officers	10,783	0	0	7,775	13	0
Travelling allowance of establishment	14,100	0	0	14,157	14	0
10. ANTIQUITIES	10,350	0	0	10,343	12	0
GRAND TOTAL	2,05,375	0	0	1,72,157	1	5

(a) Excess due to enhanced rate of leave salary of Mr. S. C. Chatterjee.

(b) Excess met from unspent balance of grant under "Annual Report".

APPENDIX A—*contd.*

Northern Circle (Muhammadan and British Monuments).

Heads.	Allotments.			Expenditure.		
	Rs.	A.	P.	Rs.	A.	P.
1. ESTABLISHMENT—						
(a) *Salaries of gazetted officers*—						
Superintendent's salary	12,600	0	0	12,600	0	0
Mr. J. F. Blakiston's leave salary from the 6th to 23rd November 1921.				198	2	0
(b) *Salaries of office establishment*—						
Two Conservation Assistants	3,840	0	0	3,467	8	0
One Munshi	1,740	0	0	1,390	5	0
Three Clerks	3,288	0	0	3,128	4	0
Two Photographers	1,752	0	0	1,421	8	0
One Draftsman	1,260	0	0	1,208	10	0
Seven Attenders and Servants	1,344	0	0	1,109	0	0
Temporary establishment	290	0	0	252	0	0
Leave allowance to establishment	3,450	0	0	817	13	0
2. CONSERVATION—*See* pages 212—225.						
3. EXCAVATION	*Nil.*			*Nil.*		
4. MUSEUMS AND DAK BUNGALOWS IN THE UNITED PROVINCES AND THE PROVINCE OF DELHI—						
(a) *Delhi Museum of Archæology*—						
Pay of Gallery Assistant	1,200	0	0	1,025	15	0
Pay of clerk	780	0	0	762	8	0
Pay of four servants	540	0	0	680	6	0
Grain compensation allowance	100	0	0	55	7	0
Contingencies—						
Pay of Menials	580	0	0	475	10	0
Miscellaneous including construction of new cases	2,550	0	0	4,441	0	6
	2,000	0	0			
Carried over	37,314	0	0	33,034	0	6

APPENDIX A—*contd.*

Heads.	Allotments.			Expenditure.		
	Rs.	A.	P.	Rs.	A.	P.
Brought forward .	37,314	0	0	33,034	0	6
4. MUSEUMS AND DAK BUNGALOWS IN THE UNITED PROVINCES AND THE PROVINCE OF DELHI—*contd.*						
(*b*) *Taj Museum*	250	0	0	232	8	0
(*c*) *Dak Bungalow at Sikandra, Agra*—						
Pay of Chowkidar, etc.	250	0	0	247	0	0
5. PUBLICATIONS	*Nil.*			*Nil.*		
6. PHOTOGRAPHY—						
Photographs and photo materials	800	0	0	1,213	5	0
7. LIBRARY—						
Purchase of books	200	0	0	166	2	2
8. OFFICE CONTINGENCIES—						
Petty supplies and services	50	0	0	236	5	10
Liveries and warm clothing	110	0	0	0	4	0
Rents, rates and taxes	660	0	0	113	8	6
Service postages and telegram charges . . .	1,000	0	0	600	0	0
Conveyance of tents, stores and records . . .	600	0	0	332	7	0
Office expenses and miscellaneous	2,070	0	0	1,235	13	6
9. ALLOWANCES, ETC.—						
Travelling allowance to officers	3,500	0	0	3,044	12	0
Travelling allowance to establishment . . .	3,550	0	0	2,669	9	0
Compensation for dearness of provision . . .	30	0	0	....		
10. TEMPORARY DRAFTSMAN EMPLOYED ON THE SURVEY OF ANCIENT MONUMENTS IN THE PROVINCE OF DELHI—						
Pay of 4 Temporary Draftsmen	1,920	0	0	2,520	0	0
	600	0	0			
Travelling allowance	730	0	0	729	0	0
Contingencies	250	0	0	223	12	3
GRAND TOTAL .	53,884	0	0	46,598	7	9

APPENDIX A—*contd.*

Northern Circle (Hindu and Buddhist Monuments).

Heads.	Allotments.	Expenditure.
	Rs. A. P.	Rs. A. P.
1. ESTABLISHMENT—		
(*a*) *Salaries of gazetted officers*—		
Salary of Superintendent	10,240 0 0	15,550 13 0 (for Salary of Superintendent and Leave allowance)
Leave allowance	5,100 0 0	
(*b*) *Salaries of office establishment*—		
Conservation Assistants	3,700 0 0	11,741 11 0 (for Conservation Assistants to Leave allowance)
Pundits and Munshis	1,560 0 0	
Photographers	1,548 0 0	
Draftsmen	2,410 0 0	
Clerks	2,040 0 0	
Servants	972 0 0	
Reappropriation sanctioned, *vide* Director General of Archæology in India's letter No. 321-4134, dated the 23rd April 1922, to the Superintendent, Hindu and Buddhist Monuments.	97 0 0	
House rent and other allowances	150 0 0	
Leave allowance	700 0 0	
Compensation for dearness of provision	50 0 0	59 10 3
Salary and travelling allowance of two Supernumerary Conservation Assistants.	2,200 0 0	2,143 11 0
2. CONSERVATION—*See* pages 226—227.		
3. EXCAVATION CHARGES—		
Excavations at Raja Karan ka Killa	6,000 0 0 (for all four excavation items)	416 6 0
Excavations around the pillar at Kosam, District Allahabad.		578 11 6
Minor antiquities at Deogarh, District Jhansi		54 10 0
Excavations on the ancient ruins at Sarnath, District Benares.		2,432 4 3
Carried over	36,767 0 0	32,977 13 0

APPENDIX A—*contd.*

Heads.	Allotments.	Expenditure.
	Rs. A. P.	Rs. A. P.
Brought forward .	36,767 0 0	32,977 13 0
4. MUSEUM AND BUNGALOW IN THE UNITED PROVINCES . .	2,000 0 0	....
Reappropriation sanctioned, *vide* Director General of Archæology in India's letter No. 93-305-5409, dated the 23rd January 1923, to the Superintendent, Hindu and Buddhist Monuments.	430 0 0	....
Salary of the permanent staff attached to the Archæological Museum at Sarnath.	....	1,120 8 0
Salary of the temporary establishment and contingent charges.	....	1,300 4 0
5. PUBLICATIONS	*Nil.*	...
6, 7 AND 8. PHOTOGRAPHY, LIBRARY AND OFFICE CONTINGENCIES—		
Contingencies	4,940 0 0	6,072 12 1
Reappropriation sanctioned, *vide* Director General of Archæology in India's letter No. 161-5473, dated the 18th November 1922, to the Suprintendent, Hindu and Buddhist Monuments.	513 11 6	
Reappropriation sanctioned, *vide* Director General of Archæology in India's letter No. 73-324, dated the 23rd March 1923.	619 0 7	
9. ALLOWANCES—		
(*a*) Travelling allowance of Superintendent . .	3,000 0 0	2,914 14 0
(*b*) Travelling allowance of establishment . .	3,050 0 0	3,477 5 0
(*c*) Reappropriation sanctioned, *vide* Director General of Archæology in India's letter No. 73-324-C., dated the 23rd March 1923, to the Superintendent, Hindu and Buddhist Monuments.	427 5 0	
GRAND TOTAL .	51,747 1 1	47,863 8 1

Appendix A—*contd.*

Frontier Circle.

Heads.	Allotments.			Expenditure.		
	Rs.	A.	P.	Rs.	A.	P.
1. Establishment—						
(*a*) *Salary of gazetted officer—*						
Superintendent	12,660	0	0	12,653	4	0
(*b*) *Salaries of office establishment—*						
Indian Assistant	3,120	0	0	3,120	0	0
Clerks	1,348	0	0	1,696	14	0
Photographer	1,272	0	0	1,272	0	0
Draftsman	975	0	0	926	11	0
Temprorary establishment	140	0	0	144	0	0
Servants	624	0	0	591	13	0
2. Conservation—*See* page 228.						
3. Excavations	5,000	0	0	3,233	4	0
4. Museums	*Nil.*			*Nil.*		
5. Publications—						
Publication of annual report	200	0	0	101	5	0
6. Photography—						
Photographic materials	300	0	0	461	8	6
7. Library—						
Purchase of publications and books	150	0	0	319	11	0
8. Contingencies—						
Purchase of antiquities	50	0	0	70	0	0
Purchase of instruments	50	0	0	43	9	0
Purchase of stationery	50	0	0	16	13	0
Purchase of liveries	40	0	0	40	0	0
Postal charges	200	0	0	200	0	0
Tour charges	600	0	0	275	7	0
Hot and cold weather charges	200	0	0	236	3	0
Purchase and repair of office furniture	50	0	0	80	2	0
Pay of menials	70	0	0	72	0	0
Miscellaneous charges	600	0	0	657	5	6
9. Allowances—						
Travelling allowance of officers	3,000	0	0	1,666	0	0
Travelling allowance of establishment	*2,000	0	0	2,656	14	0
Grain compensation allowance	80	0	0	33	3	2
Grand Total	32,779	0	0	30,573	15	2

* Grant increased by Rs. 1,200 by re-appropriation from the head "Supplies and Services."

APPENDIX A—*contd.*

Western Circle.

Heads.	Allotments.			Expenditure.		
	Rs.	A.	P.	Rs.	A.	P.
1. ESTABLISHMENT—						
(*a*) *Salaries of gazetted officers*—						
Superintendent	20,100	0	0	9,600	0	0
Assistant Superintendent				5,308	5	0
(*b*) *Salaries of office establishment*—						
Clerks, Stenographer, Draftsmen, Photographers and Peons.	13,948	0	0	9,926	15	0
2. CONSERVATION—*See* pages 229—238.						
3. EXCAVATION	5,000	0	0	2,807	11	3
4. MUSEUMS	*Nil.*			*Nil.*		
5. PUBLICATIONS	*Nil.*			*Nil.*		
6. PHOTOGRAPHY—						
Photographs and photo materials	1,000	0	0	848	14	0
7. LIBRARY—						
Purchase of books, etc.	300	0	0	248	12	0
8. CONTINGENCIES—						
Telephone charges	300	0	0	174	0	0
Liveries and warm clothing	130	0	0	19	11	0
Postage and telegram charges	700	0	0	991	14	3
Conveyance of tents, stores and records	1,200	0	0	2,324	7	11
Office expenses and miscellaneous	550	0	0	1,045	8	3
Purchase of furniture	100	0	0	381	0	0
Purchase of stationery	....			114	6	0
Rents, rates, etc.	....			22	0	0
Petty supplies and services such as purchase and repair of tents, etc.	250	0	0	457	9	0
9. ALLOWANCES—						
Travelling allowance to—						
(*i*) Superintendent	7,200	0	0	4,548	5	0
(*ii*) Assistant Superintendent				2,646	8	0
(*iii*) Establishment	8,800	0	0	8,742	7	0
House rent allowance to Assistant Superintendent	700	0	0	600	0	0
Temporary and provisional allowances to establishment	....			435	15	0
GRAND TOTAL	60,278	0	0	51,244	4	8

APPENDIX A—*contd.*

Central Circle.

Heads.	Allotments.	Expenditure.
	Rs. A. P.	Rs. A. P.
1. ESTABLISHMENT—		
(a) *Salaries of gazetted officers—*		
Superintendent's pay		11,935 8 0
Assistant Superintendent's pay	23,800 0 0	4,421 11 0
Leave allowance (to Assistant Superintendent) .		1,179 5 0
(b) *Salaries of office establishment—*		
1 Excavation Assistant		1,660 0 0
1 Accountant		1,320 0 0
1 Photographer		925 0 0
2 Draftsmen		746 3 0
3 Clerks		2,244 3 0
1 Jamadar	11,582 0 0	135 6 0
5 Peons		634 1 0
1 Chowkidar		96 0 0
Leave allowance to establishment		384 2 0
Temporary establishment		36 0 0
Grain compensation allowance		31 10 0
2. CONSERVATION—*See* pages 239—252.		
3. EXPLORATION—		
Excavation charges	5,000 0 0	(a) 4,992 14 0
4. MUSEUMS—		
Nalanda—		
(a) Wall cases for the Nalanda Museum . .	2,000 0 0	1,818 14 0
*(b) Construction of godown and chowkidar's quarters at Nalanda . 1,751 0 0 1,649 1 0		
*(c) Maintenance and upkeep of Museum and Bungalow at Nalanda . 600 0 0 573 1 0		
Carried over .	....	32,560 13 0

(a) Of this sum Rs. 4,750 were spent at Nalanda, and the residue on maintenance at Bulandibagh and Kumrahar; all in the Patna District.

* (Included in Appendix A, 2. Conservation.)

APPENDIX A—*contd.*

Heads.	Allotments. Rs. A. P.	Expenditure. Rs. A. P.
Brought forward	....	32,560 13 0
5. PUBLICATIONS	*Nil.*	*Nil.*
6. PHOTOGRAPHY	800 0 0	1,313 12 0
7. LIBRARY	400 0 0	240 7 0
8. CONTINGENCIES—		
Rents, rates and taxes	600 0 0	470 7 0
Service postage and telegram charges	450 0 0	711 14 0
Conveyance of tents, stores and records	500 0 0	1,523 12 0
Purchase of furniture	400 0 0	42 12 0
Office expenses and miscellaneous	(a) 850 0 0	1,113 15 3
Menial charges	90 0 0	141 8 0
Telephone charges	150 0 0	325 0 0
Petty supplies and services	250 0 0	25 12 0
Liveries and warm clothing	80 0 0	65 13 0
9. ALLOWANCES—		
Travelling allowance of gazetted officers	(b)5,800 0 0	3,989 7 0
Travelling allowance of establishment		3,495 9 0
10. TEMPORARY ESTABLISHMENT (NON-GAZETTED)—		
Pay—		
1 Photographer		204 3 0
2 Peons		39 4 0
Travelling allowance		240 6 0
Grain compensation allowance		6 14 0
GRAND TOTAL	55,106 0 0	46,511 8 3

(*a*) An additional grant of Rs. 2,000 was subsequently made to cover expenditure under this head.
(*b*) An additional grant of Rs. 2,500 was subsequently made to cover expenditure under this head.

Appendix A—*contd.*

Eastern Circle.

Heads.	Allotments.			Expenditure.		
	Rs.	A.	P.	Rs.	A.	P.
1. Establishment—						
(a) *Salary of gazetted officer*— Superintendent	6,600	0	0	6,600	0	0
(b) *Salaries of office establishment*— 2 Clerks	1,536	0	0	1,520	13	3
1 Photographer	960	0	0	925	8	5
1 Draftsman	1,140	0	0	1,125	0	0
1 Duftri, 4 Peons	1,020	0	0	901	14	0
Leave allowance	1,600	0	0	388	4	7
2. Conservation—*See* pages 253—257.						
3. Exploration	7,435	0	0	3,969	11	9
4. Museums				....		
5. Publications				....		
6. Photography				1,293	3	0
7. Library				159	8	0
8. Contingencies—						
(a) Other petty supplies				68	12	0
(b) Miscellaneous				292	2	9
(c) Rents, rates and taxes				333	8	0
(d) Postage and telegram charges				275	0	0
(e) Furniture				335	0	0
(f) Liveries and warm clothing				57	0	0
(g) Conveyance of tents, etc.				343	9	9
9. Allowances— Travelling allowance	2,800	0	0	2,362	2	0
Local allowance	3,005	0	0	2,835	0	0
Grand Total	26,096	0	0	23,789	2	2

Note: the allotment of 7,435 0 0 is bracketed against heads 3 to 8 (g).

Appendix A—*contd.*

Southern Circle.

Heads.	Allotments.			Expenditure.		
	Rs.	A.	P.	Rs.	A.	P.
1. Establishment—						
(a) *Salary of gazetted officer*—						
Superintendent (on leave)	15,000	0	0	635	13	0
Officiating Superintendent	15,000	0	0	6,696	10	8
(b) *Salaries of office establishment*	4,772	0	0	4,506	12	0
2. Conservation—*See* pages 258—264.						
3. Exploration	1,000	0	0	424	14	6
4. Museums	*Nil.*			*Nil.*		
5. Publications	*Nil.*			*Nil.*		
6. Photography	1,100	0	0	578	4	0
7. Library	150	0	0	82	0	0
8. Contingencies—						
Contract contingencies	2,860	0	0	1,374	0	0
Rents, rates and taxes	960	0	0	960	0	0
9. Allowances—						
Travelling allowance	7,000	0	0*	6,210	10	0
Grand Total	47,842	0	0	21,469	0	11

* Grant increased by Rs. 2,000 by re-appropriation from the heads "Supplies and Services" and "Contingencies."

APPENDIX A—*contd.*

Burma Circle.

Heads.	Allotments.			Expenditure.		
	Rs.	A.	P.	Rs.	A.	P.
1. ESTABLISHMENT—						
(*a*) *Salary of gazetted officer*—						
Superintendent	15,600	0	0	(*a*) 21,700	0	0
(*b*) *Salaries of establishment*—						
Archæological Assistant	2,500	0	0	2,500	0	0
Architectural Surveyor	1,890	0	0	1,856	15	0
Clerks (four)	3,280	0	0	3,084	0	0
Talaing Pandit	960	0	0	960	0	0
Draftsman	815	0	0	816	0	0
Burmese Artist and Assistant Photographer	1,116	0	0	972	0	0
Servants (three)	528	0	0	524	0	0
2. CONSERVATION—*See* pages 265—269.						
3. EXCAVATION CHARGES	*Nil.*			*Nil.*		
4. MUSEUM AND BUNGALOWS	*Nil.*			*Nil.*		
5. PUBLICATIONS	*Nil.*			*Nil.*		
6. PURCHASE OF PHOTOGRAPHS AND PHOTOGRAPHIC MATERIAL	800	0	0	743	3	0
7. DIRECTOR GENERAL'S LIBRARY AND OTHER PUBLICATIONS	1,000	0	0	*Nil.*		
8. OFFICE CONTINGENCIES—						
Contract contingencies	3,500	0	0	2,493	2	0
Rents, rates and taxes	960	0	0	960	0	0
Preservation of archæological remains	500	0	0	100	0	0
9. ALLOWANCES—						
Burma allowance of officer and contingent allowance of Honorary Archæological Officer for Arakan.	1,400	0	0	1,747	0	0
Leave allowance of officer	3,000	0	0	780	10	0
Leave allowance of establishment	900	0	0	56	0	0
Travelling allowance of officer	3,000	0	0	846	8	0
Travelling allowance of establishment	2,000	0	0	2,574	1	0
Archæological scholarship	1,250	0	0	1,975	0	0
GRAND TOTAL	44,999	0	0	44,688	7	0

(*a*) Excess due to revision of the scale of pay.

APPENDIX A—*contd.*

Government Epigraphist.

Heads.	Allotments.			Expenditure.		
	Rs.	A.	P.	Rs.	A.	P.
1. ESTABLISHMENT—						
(a) *Salaries of officers*—						
Government Epigraphist and Assistant Epigraphists .	20,550	0	0	17,152	0	8
Leave allowance	2,850	0	0	(a) 2,000	0	0
(b) *Salaries of establishment*—						
Clerks	5,184	0	0	3,729	10	3
Servants	1,140	0	0	561	0	8
Leave allowance	1,000	0	0	(b) 1,001	9	9
Temporary establishment	240	0	0	....		
8. CONTINGENCIES—						
Liveries	228	0	0	5	0	0
Rents, rates and taxes	2,400	0	0	2,400	0	0
Service postage, etc.	250	0	0	249	14	0
Conveyance, etc.	2,000	0	0	282	13	6
Office expenses and miscellaneous	900	0	0	759	14	11
Menial charges	180	0	0	117	8	0
Books	550	0	0	540	5	2
Furniture	1,000	0	0	(d) 1,337	14	6
Supplies, etc.	300	0	0	52	10	0
9. ALLOWANCES—						
Travelling allowance of officers	1,500	0	0	(c) 4,897	6	0
Travelling allowance of establishment	1,000	0	0	(d) 1,613	6	0
Compensation for dearness of provisions . . .	90	0	0	....		
10. UNALLOTTED SPECIAL CHARGES—						
Reproduction of plates	5,500	0	0	1,940	7	6
Honorarium for contributions				740	0	11
GRAND TOTAL .	46,862	0	0	39,381	9	10

(a) Leave allowance paid to the Government Epigraphist from 5th June 1922 to 4th August 1922.
(b) Leave allowance paid to Head Clerk from 20th March 1922 to 9th October 1922.
(c) Excess mostly due to transfer of officers was met by reappropriation.
(d) Excess was met by reappropriation.

APPENDIX A—*contd.*

Assistant Superintendent for Epigraphy.

Heads.	Allotments.			Expenditure.		
	Rs.	A.	P.	Rs.	A.	P.
1. ESTABLISHMENT—						
(a) *Salary of officer*—						
Salary of Assistant Superintendent	5,410	0	0	6,217	11	0
(b) *Salaries of establishment*—						
Pay of permanent establishment	12,594	0	0	11,631	6	0
Pay of temporary establishment	5,520	0	0	5,976	9	0
8. CONTINGENCIES	11,280	0	0	5,696	6	6
9. ALLOWANCES—						
Assistant Superintendent's travelling allowance	1,500	0	0	1,617	10	0
Establishment travelling	1,750	0	0	3,685	1	0
GRAND TOTAL	38,054	0	0	34,824	11	6

Sir Aurel Stein.

Heads.	Allotments.			Expenditure.		
	Rs.	A.	P.	Rs.	A.	P.
1. ESTABLISHMENT—						
Salaries of officers—						
(a) Sir Aurel Stein	16,280	0	0	14,877	4	0
(b) Miss Lorimer and Miss Burgess	6,000	0	0	4,212	8	0
Honorarium of Mr. F. H. Andrews	3,300	0	0	4,600	0	0
Temporary establishment	2,530	0	0	2,470	5	0
8. CONTINGENCIES	1,150	0	0	2,384	11	0
Charges on Stein collection building, New Delhi	3,070	0	0	2,506	11	0
Aluminium material for frescoes	1,000	0	0	1,001	6	0
9. ALLOWANCES—						
Travelling allowances—						
Officers' travelling allowances	3,000	0	0	2,736	8	0
Establishment travelling allowance	400	0	0	387	9	0
Temporary Craftsmen	1,400	0	0	868	8	0
TOTAL	38,130	0	0	36,015	6	0

APPENDIX A—*contd.*

Archæological Chemist.

Heads.	Allotments.	Expenditure.
	Rs. A. P.	Rs. A. P.
1. ESTABLISHMENT—		
(*a*) Salary of Archæological Chemist	7,800 0 0	7,782 4 0
(*b*) Pay of establishment	2,344 0 0	2,233 3 0
8. CONTINGENCIES—		
Budget allotment	2,790 0 0	3,287 10 6
Supplementary allotment	500 0 0	
9. ALLOWANCES—		
(*a*) Travelling allowance of officers	1,200 0 0	1,154 6 0
(*b*) Travelling allowance of establishment	300 0 0	269 13 0
GRAND TOTAL	14,934 0 0	14,727 4 6

Indian Museum.

Heads.	Allotments.	Expenditure.
	Rs. A. P.	Rs. A. P.
1. ESTABLISHMENT—		
Pay of Superintendent	6,970 0 0	6,464 8 0
Pay of establishment	13,050 0 0	11,913 4 0
8. CONTINGENCIES—		
Acquisition and purchase of specimens	1,500 0 0	1,660 14 6
Office expenses and miscellaneous	4,800 0 0	8,137 2 6
(*a*) *Supplementary grant made by the Director General of Archæology in India*— Miscellaneous contingencies	3,500 0 0	
9. ALLOWANCES—		
Travelling allowance	2,800 0 0	3,131 6 0
ditto (Supplementary grant by Director General of Archæology).	350 0 0	
House allowance	1.510 0 0	1,505 0 0
Supervision allowance to refitters to galleries	1,800 0 0	975 0 0
GRAND TOTAL	36,280 0 0	33,787 3 0

APPENDIX A—*contd.*

Conservation.

Statement showing the expenditure incurred on the conservation of Muhammadan and British Monuments in the United Provinces, Delhi and the Punjab, during the year 1922-23.

District.	Locality.	Name of work and description.	Amount of sanctioned estimate	Allotment for the year 1922-23	Amount spent during the year 1922-23	REMARKS.
1	2	3	4	5	6	7
		UNITED PROVINCES.	Rs	Rs	Rs.	
		Special Repairs (non recurring charges)				
		Works carried out by the Public Works Department.				
Agra . .	Agra . .	Restoring the colonnades around the quadrangle of the Taj at Agra.	62,374	707	707	Practically completed in the year 1921-22 only accounts finally settled in 1922 23.
Do. . .	Sikandra . .	Completing the restoration of the east causeway and central tank in the Mausoleum at Sikandra	83,265	24,105	24,145	Completed.
Do. . .	Sikandra and Itmaduddaula.	Providing sandstone seats for visitors at Sikandra and Itmaduddaula.	834	115	115	Do.
Do. . .	Agra . . .	Special repairs to marble chhajja of Moti Masjid in Agra Fort.	1,946	*Nil*	1	Completed in the year 1921-22
Do . .	Do. . . .	Constructing a bridle path to Itbari Khan, Sadiq Khan and Salabat Khan's tomb	1,686	583	215	In progress.
Do. . .	Sikandra . .	Restoring well to the south of east causeway in the Mausoleum at Sikandra	7,199	3,929	3,929	Completed.
Do. . .	Do. . .	Reconstructing a part of the enclosure wall of Akbar's tomb at Sikandra	4,051	1,000	999	In progress.
Do. . .	Do. . .	Constructing a tube well with engine house and pumping plant in the Kanch Mahal at Sikandra	37,194	5,718	2,104	In progress. Rs 3,614 lapsed on account of late receipt of allotment.
Lucknow .	Lucknow . .	Special repairs to Chhatar Manzil Palace .	966	370	327	Completed
Sultanpur .	Isauli . .	Special repairs to Mosque at Isauli . .	371	371	130	In progress Rs. 241 lapsed on account of late receipt of allotment
		Works carried out by the Superintendent, Muhammadan and British Monuments, Northern Circle, Agra.				
Agra . .	Agra . . .	Special repairs to the office and residence of the Superintendent, Muhammadan and British Monuments, Agra.	4,561	1,561	1,560	Completed.
Do. . .	Do. . . .	Purchase of office and residence, for the Superintendent, Archæological Survey, Muhammadan and British Monuments, Agra	27,800	12,800	12,800	Do.
Do . .	Do. . . .	Supply of carpets for Dak Bungalow at Sikandra.	500	500	325	Completed. Out of the saving of Rs. 175, Rs. 155 utilised for purchase of furniture for Dak Bungalow at Sikandra.
Do. . .	Do. . . .	Purchase of furniture for Dak Bungalow at Sikandra.	2,238	2,238	2,393	Completed. Excess of Rs. 155 met from the saving on the work "supply of carpets for Dak Bungalow at Sikandra."
Jaunpore .	Jaunpore . .	Providing a hanging lamp for the Jama Masjid at Jaunpore.	100	100	78	Completed.
		Total Special Repairs .	..	..	52,828	
		Add Departmental Charges* at 10 per cent. on the works done by the Public Works Department.	..	..	6,208	
		GRAND TOTAL SPECIAL REPAIRS .	..	..	59,036	

*Departmental charges have not been shown in Returns received from Superintending Engineers and have therefore been added by the Archæological Superintendent.

Appendix A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	Remarks.
1	2	3	4	5	6	7
			Rs.	Rs.	Rs.	
		United Provinces—*contd.*				
		Annual Repairs (recurring charges).				
		Works carried out by the Public Works Department.				
Meerut	Meerut	Tomb of Shah Pir	180	180	138	
Do.	Do.	Tomb of Abu Mohammad Khan	150	150	125	
Do.	Sardhana	Cemetery at Sardhana	100	100	46	
Aligarh	Tappal	Annual repairs to old gateway monument to Fort at Tappal.		16	13	
Agra	Agra	Roman Catholic Cemetery		300	235	
Do.	Do.	Fort Buildings		4,350	4,172	
Do.	Do.	Tomb of Itmaduddaula		750	759	
Do.	Do.	Rambagh		750	505	
Do.	Do.	Chini-ka-Rauza		150	122	
Do.	Do.	Tomb of Sir John Russel		30	..	
Do.	Sikandra	Small Chattri on Agra-Sikandra Road		10	10	
Do.	Agra	Humayun Masjid		50	49	
Do.	Do.	Victoria Memorial		60	45	
Do.	Fatehpur Sikri	Fatehpur Sikri Buildings		7,500	7,255	
Do.	Taj Buildings	Taj Buildings	24,281	4,025	4,113	
Do.	Agra	Maintenance of Electric Installation in Taj		1,900	1,864	
Do.	Do.	Firoz Khan's tomb		400	428	
Do.	Do.	Chattri of Empress Jodh Bai		20	*Nil.*	
Do.	Sikandra	Akbar's tomb		2,841	3,463	
Do.	Do.	Mariam's tomb		750	1,113	
Do.	Do.	Kanch Mahal		75	44	
Do.	Agra	Itbari Khan's mosque		20	21	
Do.	Do.	Itbari Khan's tomb		50	52	
Do.	Do.	Salabat Khan's tomb		50	48	
Do.	Do.	Sadiq Khan's tomb		50	47	
Do.	Do.	Guru-ka-tal		50	50	
Do.	Do.	Burhia-ka-tal		100	..	
		Carried over	..	..	24,717	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
1	2	3	4	5	6	7
			Rs.	Rs.	Rs.	
		Brought forward .	..	..	24,717	
		UNITED PROVINCES—*contd.*				
		Annual Repairs (recurring charges)—contd.				
		Works carried out by the Public Works Department—contd.				
Muzaffarnagar	Majhera . .	Tomb of Saiyad Saif Khan and his mother				
		Tomb of Diwan Saiyad Mohammad Khan				
		Tomb of Saiyad Husain, dated A. H. 1000 or 1592 A. D. sometimes called Saiyad Chajju Khan.	150	150	150	
		Tomb of Saiyad Umar Noor Khan Octagonal Well.				
Lucknow .	Mile 4 of Lucknow-Cawnpore Road.	Alambagh House	750	750	750	
Do. .	Lucknow . .	Lal Baradari	550	550	485	
Do. .	Do. . .	Chhatar Manzil Palace	3,750	3,750	3,667	
Do. .	Do . .	Platform in front of Chhatar Manzil Palace	105	105	70	
Do. .	Do. . .	Farhat Baksh Station Library	1,200	1,200	1,197	
Do. .	Do. . .	Neil's Gate	15	15	15	
Do. .	Do. . .	Sikandar Bagh Buildings	450	450	422	
Do. .	Do. . .	Kaisar Bagh Gates	1,200	1,200	1,187	
Do .	Do. . .	Nadan Mahal and Ibrahim Chishti's tomb .	630	630	630	
Do. .	Do. . .	Nasiruddin Haidar's Karbala	450	450	450	
Do. .	Do. . .	Janab Aliya's tomb	850	850	847	
Do. .	Do. . .	Residency Buildings	1,500	1,500	1,383	
Do. .	Do. . .	Bibiapur House	300	300	279	
Do. .	Do. . .	Dilkusha Palace	750	750	714	
Hardoi .	Mallawan . .	Fine well	22	22	15	
Do. .	Shahabad . .	Nawab Deler Khan's tomb	495	495	224	
Allahabad .	Allahabad . .	Zenana Palace	200	200	201	
Do. .	Do. . .	Khusru Bagh	450	450	450	
Mirzapur .	Chunar . .	Iftikhar Khan's tomb . .	750	750	408	
Cawnpore .	Cawnpore . .	Savada Kothi Monuments including flight of steps with the surrounding plateau.	45	45	43	
Farrukhabad	Mau Rashidabad	Tomb of Nawab Rashid Khan	15	15	8	
Do. .	Karhar . .	Well in village Karhar	15	15	7	
Do. .	Chaudhariyapur .	Unknown tomb	15	15	6	
Jalaun .	Kalpi . .	Chaurasi Gumbad tomb of Lodhi Shah Badshah.	450	450	441	
Fyzabad .	Fyzabad . .	Gulab Bari	800	800	746	
Akbarpur .	Akbarpur . .	Fort	25	25	25	
		Carried over .	..	..	39,537	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
1	2	3	4	5	6	7
			Rs.	Rs.	Rs.	
		Brought forward	..	..	39,537	
		UNITED PROVINCES—*contd.*				
		Annual Repairs (recurring charges)—concld.				
		Works carried out by the Public Works Department—concld.				
Benares	Benares	Aurangzeb's Mosque	112	112	108	
Ghazipur	Bhitri	Bhitri Stone Bridge	15	15	15	
Jaunpur	Jaunpur	Jama Masjid	975	975	284	
Do.	Do.	Atala Masjid			149	
Do.	Do.	Lal Darwaza Masjid			67	
Do.	Do.	Fort			255	
Do.	Do.	Gomti Bridge			10	
Do.	Do.	Sai Bridge, Jalalpur			5	
Do.	Do.	Sher Zaman Khan's tomb			35	
Do.	Do.	Jhanjhiri Masjid			31	
Do.	Do.	Firoz Shah ka Roza			63	
Do.	Do.	King's tombs			75	
Azamgarh	Mehnagar	Daulat's tomb at Mehnagar	75	75	21	Only ordinary necessary repairs done, hence the saving.
		Works carried out by the Superintendent, Muhammadan and British Monuments, Northern Circle, Agra.				
Agra	Agra	Annual repairs to office and residence of Superintendent, Muhammadan and British Monuments, Northern Circle, Agra.	350	350	323	
		Total Annual Repairs	..	..	40,978	
		Add Departmental Charges at 19 per cent. on works done by the Public Works Department. *	..	..	7,724	
		GRAND TOTAL ANNUAL REPAIRS	..	..	48,702	
		Deduct	..	..	30†	
		NET TOTAL	..	..	48,672	

* Departmental charges have not been shown in returns received from Superintending Engineers and have therefore been added by the Archæological Superintendent.

† A sum of Rs. 30-6-0, expended during the year 1921-22 on the cemetery at Kukargahna in the Jaunpore District, a work maintained from Provincial funds but wrongly debited to Central Revenues in that year, was adjusted in October 1922, *vide* Accountant General, United Provinces, No. 2399, dated 6th October 1922.

APPENDIX A—*contd.*

District.	Locality.	Name of Garden.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
1	2	3	4	5	6
		UNITED PROVINCES.	Rs.	Rs.	
		Maintenance of Gardens (recurring charges).			
Allahabad	Allahabad	Khusru Bagh			
Agra	Agra	Taj			
Do.	Do.	Khan-i-Alam			
Do.	Do.	Agra Fort			
Do.	Do.	Itmad-ud-daulah			
Do.	Do.	Chini-ka-Rauza	63,799	63,799*	*Rs. 16,376 included for funding payments for the year 1921-22.
Do.	Do.	Ram Bagh			
Do.	Do.	Roman Catholic Cemetery			
Do.	Sikandra	Akbar's tomb			
Lucknow	Lucknow	Residency Garden			
Do.	Do.	Nadan Mahal and Ibrahim Chisti's tomb			
Cawnpore	Cawnpore	Cawnpore Gardens			
		Total Gardens	63,799	63,799	

	Rs.
Total Special Repairs	59,036
Total Annual Repairs	48,702
Total Gardens	63,799
GRAND TOTAL FOR THE UNITED PROVINCES	1,71,537

Appendix A—*contd.*

Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	Remarks.
1	2	3	4	5	6
		Rs.	Rs.	Rs.	
	Delhi Province.				
	Special Repairs (non-recurring charges).				
Delhi . .	Conservation work at Khairul-Manazil	16,270	10,539	9,929	In progress.
Hauz Khas .	Constructing an approach road from the Delhi Qutab road (mile 9) to Hauz Khas.	11,510	8,000	7,867	Do.
Delhi . .	Removal of earth and débris from Sher Shah's gateway.	2,705	2,000	1,953	Completed.
Ridge . .	Special repairs to the Chauburji Mosque on Ridge .	200	160	163	Do.
Tughlaqabad .	Conservation of road front wall, Tughlaqabad Fort .	26,228	410	414	Do.
Do. . .	Carrying out repairs to the bastion at Tughlaq's tomb.	4,270	2,010	1,901	In progress.
Delhi . .	Providing a two seated latrine in the Fort Palace gardens.	290	290	292	Completed.
Do. . .	Reducing levels of boundary of Mumtaz Mahal section in the Fort Palace gardens.	260	260	248	Do.
Do. . .	Printing entrance tickets for Fort Palace gardens.	250	250	250	
Do. . .	Special repairs to the ceiling of Rang Mahal in Fort Palace gardens.	2,570	1,970	1,855	In progress.
Do. . .	Improving the water-supply in the Fort Palace gardens	25,000	25,000	25,000	Completed.
Mehrauli . .	Special repairs to the well at Qutab Minar .	500	500	483	Do.
Do. . .	Carrying out certain repairs to the godown at Qutab Minar.	250	250	250	Do.
Do. . .	Erection of notices in front of the Dak Bungalow at Qutab Minar.	50	50	50	Do.
Do. . .	Proposed cast iron sheet shed for the pumping station at Qutab Minar.	485	480	405	In progress.
Purana Qila .	Carrying out repairs of Sher Mandal at Purana Qila	120	70	72	Completed.
Do. .	Making special connections for irrigation water-supply to Purana Qila.	4,400	4,400	4,042	In progress.
Safdar Jang .	Connecting gardens at Safdar Jang's tomb with the permanent irrigation water-supply scheme in the new Capital area.	3,060	3,000	3,021	Do.
Humayun's tomb	Special repairs to the lower dalan along north-east corner of Humayun's tomb.	885	885	880	Completed.
Khirkee . .	Certain works to be done at Khirkee Mosque .	7,806	2,842	2,709	In progress.
Mehrauli . .	Conservation works at Zafar Mahal	2,760	380	380	Completed.
	Total Special Repairs .	..	..	62,164	
	Add Departmental Charges at 10 per cent. .	..	..	6,216	
	Grand Total Special Repairs .	..	..	68,380	

APPENDIX A—*contd.*

Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
1	2	3	4	5	6
		Rs.	Rs.	Rs.	
	DELHI PROVINCE—*contd.*				
	Annual Repairs (recurring charges).				
	A.—Historical buildings to the north of Delhi Gate.				
Delhi	1. Miniature Batteries	..	..	..	
Do.	2. Tomb of Razia Begam	..	..	..	
Do.	3. Asoka Pillar	..	..	..	
Do.	4. Zinat-ul-Masajid	..	..	..	
Do.	5. Masjid Kalan	..	..	..	
Do.	6. Baoli and underground passage at Ridge	..	..	..	
Do.	7. Mutiny Memorial	..	..	..	
Do.	8. Sunehri Masjid	..	..	..	
Do.	9. Chauburji Mosque	..	..	..	
Do.	10. Cemetery near Roshanara garden	..	..	..	
Do.	11. Shahburj and Hayat Baksh garden	..	..	..	
Do.	12. Diwan-i-Khas	..	..	..	
Do.	13. Mumtaz Mahal	..	..	..	
Do.	14. Tank in Delhi Fort	..	..	..	
Do.	15. Bhadon Buildings	..	..	..	
Do.	16. Sawan	..	..	..	
Do.	17. Zafar Mahal	..	..	..	
Do.	18. Moti Masjid	..	..	..	
Do.	19. Hammam	..	..	..	
Do.	20. Saman Burj	..	..	..	
	B.—Historical buildings outside Delhi and Ajmeri Gates.				
Delhi	1. Qutab Minar, Mehrauli	..	..	..	
Do.	2. Jahaz Mahal, Mehrauli	..	..	..	
Do.	3. Bastion at Siri	..	..	..	
Do.	4. Purana Qila	..	..	..	
Do.	5. Khairul-Manazil	..	..	..	
	Carried over	..	..	..	

APPENDIX A—*contd.*

Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
1	2	3	4	5	6
		Rs.	Rs.	Rs.	
	Brought forward	..	..	..	
	DELHI PROVINCE—*contd.*				
	Annual Repairs (recurring charges)—contd.				
	B.—Historical buildings outside Delhi and Ajmeri Gates—contd.				
Delhi	6. Ferozshah Kotla	..	..	..	
Do.	7. Lal Darwaza	..	..	..	
Do.	8. Humayun's tomb, and the tomb of his barber	..	..	..	
Do.	9. Safdar Jang's tomb	..	..	..	
Do.	10. Begumpuri Masjid	..	..	..	
Do.	11. Hauz Khas group including tomb of Feroz Shah	..	..	..	
Do.	12. Tughlaqabad	..	..	..	
Do.	13. Moth-ki-Masjid	..	..	..	
Do.	14. Malcha Bistdari buildings	..	..	..	
Do.	15. Bijai Mandal	..	..	..	
Do.	16. Mubarakpur group	..	..	..	
Do.	17. Satpullah, Khirkee	..	..	..	
Do.	18. Bahlol Lodhi's tomb	..	..	..	
Do.	19. Siri old city	..	..	..	
Do.	20. Ghiasuddin Tughlaq's tomb	..	..	..	
Do.	21. Basti Baoli	..	..	..	
Do.	22. Shikargah Kushak	..	..	..	
Do.	23. Tombs between Hauz Khas and Qutab Road	..	..	..	
Do.	24. Shikargah Mehpalpur	..	..	..	
Do.	25. Sultan Ghari's tomb, Mehpalpur	..	..	..	
Do.	26. Serai Shahji	..	..	..	
Do.	27. Rajon-ki-Bain	..	..	..	
Do.	28. Qila Rai Pathora, Mehrauli	..	..	..	
Do.	29. Kalo Serai Mosque	..	..	..	
	Carried over	..	..	..	

APPENDIX A—*contd.*

Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
1	2	3	4	5	6
		Rs.	Rs.	Rs.	
	Brought forward .	..	..	..	
	DELHI PROVINCE—*contd.*				
	Annual Repairs (recurring charges)—contd.				
	B.—Historical buildings outside Delhi and Ajmeri Gates—contd.				
Delhi .	30. Tomb of Yusuf Qattal, Khirkee	..	..	..	
Do. .	31. Lal Gumbad	..	..	..	
Do. .	32. Humayunpur Monuments	..	..	..	
Do. .	33. Mohammadpur Monuments	..	..	..	
Do. .	34. Munirka Monuments	..	..	..	
Do. .	35. Zamarudpur Monuments	..	..	..	
Do. .	36. Unnamed tomb of Chiragh, Delhi	..	..	..	
Do. .	37. Mosque near south-west corner of Bagh Nazir . .	..	..	..	
Do. .	38. Muhammad Quli Khan's tomb at Qutab	..	..	..	
Do. .	39. Adham Khan's tomb at Mehrauli	..	..	..	
Do. .	40. Bahadur Shah II's Palace at Mehrauli . . .	..	..	..	
Do. .	41. Muhammadi Masjid near Shahpur	..	..	..	
Do .	42. Tomb and Mosque of Jamali Kamali at Qutab . .	..	..	..	
Do. .	43. Khirkee Masjid	..	..	..	
Do. .	44. Isa Khan's tomb	..	..	..	
Do. .	45. Khairpur Lodhi's tomb	..	..	..	
Do. .	46. Sabzburj	..	..	..	
Do. .	47. Nizamuddin's tomb with 3 domes near Railway Station	..	..	..	
Do. .	48. Khan Khana's tomb	..	..	..	
Do. .	49. Kos Minar	..	..	..	
Do. .	50. Arab Serai	..	..	..	
Do. .	51. Afsarwala Mosque and tomb	..	..	..	
Do. .	52. Atga Khan's tomb at Nizamuddin	..	..	..	
Do. .	53. Junnah Shah's Mosque at Nizamuddin	..	..	..	
Do. .	54. Monuments between Purana Qila and Humayun's tomb	..	..	..	
	Carried over .	..	..	..	

APPENDIX A—*contd.*

Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
1	2	3	4	5	6
		Rs.	Rs.	Rs.	
	Brought forward .	..	..	..	
	DELHI PROVINCE—*contd.*				
	Annual Repairs (recurring charges)—concld.				
	B.—Historical buildings outside Delhi and Ajmeri Gates—concld.				
Delhi .	55. Tomb of Ghiyasuddin outside Ajmeri Gate . .	..	..	..	
Do. .	56. Nila Gumbad to the east of Humayun's tomb . .	..	..	..	
Do. .	57. Tomb and Baoli at Nizamuddin	..	..	..	
Do. .	58. Chaunsath Khamba	..	..	..	
Do. .	59. Tomb of Amir Khusru at Nizamuddin . . .	..	..	..	
Do. .	60. Baraopula	..	..	..	
Do. .	61. Tomb of Darya Khan	..	..	..	
Do. .	62. Wall Mosque at Mehrauli	..	..	..	
Do. .	63. Abdul Nabi's Mosque near Mahabat Khan's Haveli .	..	..	6,301	
Do. .	64. Old Magazine gateway	110	140	136	
Do. .	65. Baradari in Roshanara Garden	1,010	1,100	1,092	
	Total .	..	..	7,529	
	Add Departmental Charges at 10 per cent. .	..	..	753	
	GRAND TOTAL ANNUAL REPAIRS .	..	..	8,282	

Appendix A—*contd.*

Locality.	Name of Gardens.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	Remarks.
1	2	3	4	5
	Delhi Province—*contd.*	Rs.	Rs.	
	Maintenance of Gardens (recurring charges).			
Delhi	Kotla Feroz Shah	} 34,700	2,776	
Do.	Purana Qila		5,357	
Do.	Humayun's tomb, Buhalima Garden, Isa Khan's tomb and Arab Serai		13,046	
Do.	Safdar Jang's tomb		5,416	
Do.	Hauz Khas		1,090	
Do.	Qutb Gardens		6,925	
Do.	Running and maintenance of a pumping installation for the Qutb Garden.	4,160	4,203	
Do.	Running expenses of three pumps for irrigating purposes	800	298	
Do.	Unfiltered water-supply for Delhi Fort Gardens	6,100	4,032	
Do.	Annual repairs to the pumping station at Jumna Bridge for Delhi Fort Gardens.	280	80	
	Total	..	43,223	
	Add Departmental Charges at 10 per cent.	..	4,322	
	Total	..	47,545	
	Delhi Fort Gardens.			
	1. Salary of Superintendent, Historical Buildings and his Establishment	9,281	} 13,883	Funds provided by the Provincial Government.
	2. Pay of Malis and other Horticultural expenses	3,096		
	3. Contingencies and other charges	1,503		
	Total	..	13,883	
	Grand Total Gardens	..	61,428	

	Rs.
Total Special Repairs	68,380
Total Annual Repairs	8,282
Total Gardens	61,428
Grand Total for Delhi Province	1,38,090

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
1	2	3	4	5	6	7
			Rs.	Rs.	Rs.	
		THE PUNJAB PROVINCE.				
		Special Repairs (non-recurring charges).				
		Works carried out by the Public Works Department.				
Hissar	Hissar	Certain improvements to old Fort buildings and Town wall.	2,924	1,000	613	Completed.
Do.	Do.	Certain improvements to Jhaz Kothi	1,150	1,150	6	In progress.
Do.	Do.	Certain improvements to Lat-ki-Masjid	1,820	1,820	6	
Karnal	Thanesar	Special repairs to Sheikh Chilli's tomb	1,367	600	576	Completed.
Jhelum	Rohtas	Special repairs to Fort	5,176	4,515	2,308	Do.
Jhang	Chiniot	Special repairs to Shahi Mosque	3,840	3,840	913	In progress (contribution work).
Sheikhupura	Shahdara	Improvements to Asaf Khan's tomb	38,549	1,860	1,618	Completed.
Do.	Do.	Certain conservation works in Akbari Serai.	9,551	2,300	2,385	Do.
Lahore	Lahore	Improvements to Buddhu's tomb	4,051	3,873	959	In progress.
Do.	Do.	Improvements to Gulabi Gate	2,041	2,000	675	Do.
Do.	Shalamar	Providing a counter for pumping engine	179	..	25	Completed.
		Works carried out by the Superintendent, Archæological Survey, Muhammadan and British Monuments, Northern Circle, Agra.				
Attock	Hasan Abdal	Special repairs to the Sarcophagus of Lala Rukh's tomb.	..	300	197	Completed.
		Total	..	..	10,284	
		Add Departmental Charges* at 18 per cent. on the works done by the Public Works Department.	..	..	1,851	
		GRAND TOTAL SPECIAL REPAIRS	..	..	12,135	

* NOTE—Departmental charges have not been shown in Returns received from Superintending Engineers and have therefore been added by the Archæological Superintendent.

Appendix A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	Remarks.
1	2	3	4	5	6	7
		THE PUNJAB PROVINCE—*contd.*	Rs.	Rs.	Rs.	
		Annual Repairs (recurring charges).				
Jullundhar	Dakhni	Sarai				
Do.	Nur Mahal	Do.	258	190	227	Completed.
Do.	Nakodar	Sarai and two tombs				
Ludhiana	Ludhiana	Kos Minars	13	10	10	Do.
Gurgaon	Gurgaon	Do.	276	200	75	Do.
Rohtak	Sonepat	Khwaja Khizar's tomb	167	120	60	Do.
Do.	Rohtak	Kos Minars	176	130	125	Do.
Hissar	Hissar	Protected Monuments at—	659	490	216	Do.
Ambala	Ambala City	Kos Minars	6	5	5	Do.
Karnal	Karnal District	Historical Buildings at—	758	700	663	Do.
Jhelum	Rohtas	Fort at—	368	220	126	In progress.
Attock	Hasan Abdal	Lala Rukh's tomb				
Do.	Saidan	Saidan Baoli	663	650	371	Completed.
Do.	Losar	Losar Baoli				
Gujrat	Gujrat	Akbari Baoli	284	200	32	Do.
Do.	Kharian	Aurangzeb's Baoli				
Gujranwala	Ram Nagar	Graves in Barahdari	26	25	24	Do.
Sheikhupura	Sheikhupura	Hiran Minara and Tank	827	827	240	Do.
Do.	Shahdara	Historical Buildings at—	19,545	18,600	18,746	Do.
Lahore	Lahore	Historical Buildings at—	3,891	4,749	4,812	Do.
Do.	Shalamar Road	Shalamar Garden buildings	4,903		4,651	Do.
Do.	Do.	Budhu's tomb	12		12	Do.
Do.	Do.	Gulabi Gate	237		230	Do.
Do.	Do.	Tomb of Ali Mardan Khan	367		531	Do.
Do.	Do.	Dai Anga's Mosque and Mausoleum	163		202	Do.
Do.	Muzang	Chauburji	226	6,147	229	Do.
Do.	Shalamar Road	Budhu ka Awa	230		245	Do.
Do.	Do.	Saruwala Maqbara	7		..	Do.
Do.	Anarkali	Qutbuddin Aibak's tomb	2		2	Do.
Gurdaspur	Kalanaur	Takht-i-Akbari	160	211	80	Do.
Do.	Batala	Shamsher Khan's tomb	51		23	Do.
Amritsar	Amritsar	Saragarhi Memorial	212	212	183	Do.
		Total	..	..	32,120	
		Add Departmental Charges* at 18 per cent.	..	..	5,782	
		GRAND TOTAL ANNUAL REPAIRS	..	..	37,902	

* NOTE.—Departmental charges have not been shown in Returns received from Superintending Engineers and have therefore been added by the Archæological Superintendent.

APPENDIX A—*contd.*

District.	Locality.	Name of Garden.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	
		THE PUNJAB PROVINCE—*concld.*			
		Maintenance of Gardens (recurring charges).			
Lahore	Shalamar	Shalamar Gardens	..	8,131	Funds provided by the Provincial Government.
Do.	Lahore	Huzuri Bagh	..	1,051	
Sheikhupura	Shahdara	Shahdara Historical Gardens	..	11,483	
		Total	..	20,665	
		Total Special Repairs	..	12,135	
		Total Annual Repairs	..	37,902	
		Total Gardens	..	20,665	
		GRAND TOTAL FOR THE PUNJAB PROVINCE	..	70,702	

Summary of Conservation expenditure in the United Provinces, Delhi and the Punjab (Muhammadan and British Monuments).

Province.	Total amount spent on Special Repairs during the year 1922-23.	Total amount spent on Annual Repairs during the year 1922-23.	Total amount spent on the maintenance of gardens during the year 1922-23.	Total.
	Rs.	Rs.	Rs.	Rs.
United Provinces	59,036	48,702	63,799(1)	1,71,537
Delhi Province	68,380	8,282	61,428(2)	1,38,090
Punjab Province	12,135	37,902	20,665(3)	70,702
	1,39,551	94,886	1,45,892	3,80,329
GRAND TOTAL FOR CONSERVATION OF MONUMENTS AND MAINTENANCE OF GARDENS.	..	..	..	3,80,329

(1) Rs. 23,426 included for funding payments for the year 1921-22.

(2) Rs. 13,833 provided from Provincial funds.

(3) Provided by Provincial Government.

APPENDIX A—*contd.*

Statement showing the expenditure incurred on the conservation of ancient Hindu and Buddhist Monuments in the Punjab during the year 1922-23.

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs. A. P.	
		THE PUNJAB.				
		Special Repairs (non-recurring charges).				
Karnal	Thanesar	Constructing boundary pillars around the mound known as Raja Karn ka Killa.	200	200	197 0 0	Completed.
Jhelum	Katas	Special repairs to temple at Baghanwala	526	526	532 0 0	Do.
Shahpur	Amb	Special repairs to temple in the Fort at Amb.	2,623	3,200	1,796 0 0	In progress.
Karnal	Thanesar	Excavations on the ancient mound known as Raja Karn ka Killa.	1,743	1,743	1,182 15 6	Work executed by Archæological Superintendent.
Rawalpindi	Taxila	Water-supply at Taxila	8,011	8,011	2,787 0 0	
Do.	Do.	Construction of well at Taxila	1,745	1,745	7,605 0 0	
		Total Special Repairs	..	..	14,099 15 6	
		Annual Repairs (recurring charges).				
Rawalpindi	Mankiala	Annual repairs to Buddhist Tope	40	40	33 9 0	
Jhelum	Katas	Annual repairs to Haveli Sardar Hari Singh.	101	101	99 0 0	
Do.	Do.	Annual repairs to Satghara temple	40	40	40 0 0	
Do.	Do.	Annual repairs to Raja Man Singh's residence and Baoli.	90	90	90 0 0	
Shahpur	Amb	Annual repairs to temple	279	279	164 0 0	
Do.	Vijhi	Annual repairs to ancient site	35	35	35 0 0	
Do.	Bhera	Ditto ditto	25	25	25 0 0	
Sialkot	Sialkot	Annual repairs to Tibba Jalian	150	150	135 0 0	
Karnal	Karnal	Annual repairs to Hindu Historical buildings.	30	30	3 0 0	
Ambala	Bilaspur	Annual repairs to Kapal Mochan temple.	20	20	7 0 0	
Kangra	Kangra	Annual repairs to Kangra Fort	347	347	317 0 0	
Do.	Nurpur	Annual repairs to Nurpur Fort	19	19	18 0 0	
Kulu	Bajaura	Annual repairs to temple of Basheshar Mahadeo.	35	35	19 0 0	
		Total Annual Repairs	..	..	985 9 0	
		Total Special Repairs	..	..	14,099 15 6	
		Add Departmental Charges at 19 per cent. on Rs. 13,902.	..	..	2,641 7 0	
		GRAND TOTAL FOR THE PUNJAB (HINDU AND BUDDHIST MONUMENTS).	..	..	17,726 15 6	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs. A. P.	
		UNITED PROVINCES.				
		Special Repairs (non-recurring charges).				
Almora	Dwarahat	Conservation of antiquities	13,780	3,653	1,418 0 0	In progress.
Do.	Do.	Minor conservation of antiquities	96	96	88 0 0	
Allahabad	Kosam near Karari	Re-erection of pillar at Kosam	1,594	2,000	414 0 0	In progress.
Hamirpur	Mahoba	Conservation of monuments at and near Mahoba.	5,613	1,000	403 1 6	Ditto.
Benares	Sarnath	Conservation of ancient Buddhist ruins	..	5,000	1,688 13 0	Ditto, work executed by Archæological Superintendent.
Etah	Bilsar	Excavation and conservation of Gupta relics.	..	2,000	295 5 6	In progress.
		Total Special Repairs	..	..	4,307 4 0	
		Annual Repairs (recurring charges).				
Muttra	Brindaban	Annual repairs to monuments and antiquities, temple of Govinddeoji, Jugal Kishore and Radha Ballabh.	600	600	605 0 0	
Agra	Agra	Annual repairs to Jaswant Singh ki Chhatri.	150	150	149 15 6	
Dehra Dun	Kalsi	Annual repairs to Asoka Stone	37	37	17 0 0	
Hardoi	Sandi	Annual repairs to Phulmati temple	5	5	5 0 0	
Allahabad	Sheorajpur	Annual repairs to Garhwa Fort	100	100	80 0 0	
Mirzapur	Chunar	Annual repairs to Chunar Fort Gate	50	50	42 0 0	
Gorakhpur	Kasia	Annual repairs to Buddhist remains	172	172	136 2 0	
Gonda	Sahet-Mahet	Ditto ditto	272	272	269 2 0	
Benares	Sarnath	Ditto ditto	900	900	896 0 0	
Ghazipur	Saidpur Bhitri	Annual repairs to Asoka pillar	10	10	6 0 0	
		Total Annual Repairs	..	..	2,206 3 6	
		GRAND TOTAL (ANNUAL AND SPECIAL REPAIRS).	..	..	6,513 7 6	
		Add Departmental Charges at 19 per cent.	..	..	861 0 0	
		GRAND TOTAL FOR THE UNITED PROVINCES (HINDU AND BUDDHIST MONUMENTS).	..	..	7,374 7 6	
		Total of Conservation Expenditure on Hindu and Buddhist Monuments in the Punjab and the United Provinces.	..	..	23,101 7 0	

Appendix A—*contd.*

Statement showing the expenditure incurred in the conservation of ancient monuments in the Frontier Province during the year 1922-23.

District	Locality	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	Remarks.
			Rs. A. P.	Rs. A. P.	Rs. A. P.	
		Frontier Province				
		Special Repairs (non recurring charges)				
Peshawar	Tahsil Mardan	Conservation at Jamalgarhi	..	5,000 0 0	8,842 8 0	(a) Carried out by Superintendent, Archæological Survey, Frontier Circle. (b) Rs 3,842-8-0 met by reappropriation from excavation grant to meet cost of clearance.
Do.	Do.	Conservation at Takht-i-Bahi	1,127 0 0	1,408 0 0	1,117 0 0	
Do.	Do.	Conservation at Larger Rock at Shahbazgarhi	1,338 0 0	1,200 0 0	} 2,243 0 0	
Do.	Do.	Conservation at Smaller Rock at Shahbazgarhi	1,465 0 0	1,312 0 0		
Do.	Do.	Conservation at Kashmir Smas	1,046 0 0	1,307 0 0	..	
Do.	Do.	Conservation at Tareli	1,068 0 0	1,335 0 0	..	
Do.	Peshawar	Electrification of the office of Superintendent, Archæological Survey, Frontier Circle.	1,596 0 0	..	1,590 13 4	Amount was met by the Director General of Archæology, vide his No 188 2836, dated 3rd August 1922.
Hazara	Near Taxila	Acquisition of six excavated sites at Jaulian, Jandial C, Tofkian, Lalchak monastery and stupa, Badalpur monastery and stupa	3,428 4 0	2,385 0 0	2,385 0 0	Balance of Rs. 1,043-4-0 was met from Director General of Archæology's Reserve.
Do.	Do.	Cost of boundary pillars and notice boards	..	400 0 0	79 15 0	
		Total Special Repairs		.	16,258 4 4	
		Annual Repairs (recurring charges)				
Peshawar	Tahsil Mardan	Maintenance charges at Jamalgarhi	..	480 0 0	180 0 0	
Do.	Do.	Maintenance charges at Takht-i-Bahi	..	380 0 0	360 0 0	
Hazara	Near Taxila	Maintenance charges at Jaulian	.	1,076 7 0	1,121 0 0	
Do.	Do.	Annual repairs at Jaulian	..	179 9 0	179 9 0	
Do.	Do.	Maintenance charges at Nikra	.	432 0 0	452 0 0	
Do.	Do.	Annual repairs at Nikra	..	843 0 0	843 0 0	
Do.	Do.	Maintenance charges at Jandial	..	280 0 0	180 0 0	
Do.	Do.	Maintenance charges at Pipplan	.	185 0 0	169 5 8	
		Total Annual Repairs	..	..	3,493 14 8	
		Grand Total Special and Annual Repairs	..	.	19,752 3 0	
		Add Departmental Charges	..	..	824 0 0	
		Grand Total for Frontier Province.	..	..	20,576 3 0	

APPENDIX A—*contd.*

Statement showing the expenditure incurred in the conservation of ancient monuments in the Bombay Presidency including Sind during the year 1922-23.

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		BOMBAY PRESIDENCY.				
		NORTHERN DIVISION.				
		Special Repairs (non-recurring charges).				
Ahmedabad .	Dholka . .	Khan Masjid. (Total expenditure up to date is Rs. 11,288.)	5,373 8,568	4,000	3,999	In progress.
Do. .	Do. . .	Ditto	2,340	1,000	994	Do.
Panch Mahals	Champaner .	Certain monuments at Champaner (15 in number). (Revised total expenditure up to date is Rs. 66,843.)	1,05,223	7,000	6,999	Do.
Do. .	Thasra, Sarnal .	Galtesvara Mahadeva temple. (Total expenditure up to date is Rs. 9,399.)	12,084	1,500	1,451	Do.
Thana .	Bassein . .	Portuguese monuments. (Total expenditure up to date is Rs. 11,183.)	24,621	7,183	7,183	Do.
Presidency .	Gharapuri .	Elephanta caves. (Total expenditure up to date is Rs. 18,280.)	33,831 (7 estimates).	4,280	4,280	Do.
		Total Special Repairs (Northern Division).	..	..	24,906	
		Annual Repairs (recurring charges).				
Ahmedabad .	Ahmedabad .	Ahmad Shah's mosque	40	40	39	Completed.
Do. .	Do. .	Sidi Saiyyad's mosque	15	15	15	Do.
Do. .	Do. .	Bhadar Tower	20	20	20	Do.
Do. .	Do. .	The Three Gates	20	20	20	Do.
Do. .	Do. .	Rani Sipri's mosque	20	20	20	Do.
Do. .	Do. .	Dada Harir's mosque and tomb .	40	40	40	Do.
Do. .	Do. .	Dada Harir's well	20	20	20	Do.
Do. .	Do. .	Muhafiz Khan's mosque	20	20	19	Do.
Do. .	Do. .	Queen's mosque	25	25	21	Do.
Do. .	Do. .	Bava Loli's mosque	35	35	35	Do.
Do. .	Do. .	Dutch tombs on Kankaria tank .	60	60	60	Do.
Do. .	Do. .	Achyut Bibi's mosque	30	30	30	Do.
		Carried over .	..	..	339	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	339	
		BOMBAY PRESIDENCY—*contd.*				
		NORTHERN DIVISION—*contd.*				
		Annual Repairs (recurring charges) —contd.				
Ahmadabad	Ahmadabad	Sidi Basir's mosque	35	35	35	Completed.
Do.	Do.	Tomb of Mir Abu Turab	40	40	38	Do.
Do.	Do.	Miyan Khan Jahan Khan's mosque	40	40	40	Do.
Do.	Do.	Ahmed Shah's mosque (maintaining a garden).	178	178	178	Do.
Do.	Do.	Sidi Saiyyad's mosque (maintaining a garden).	225	225	224	Do.
Do.	Do.	Maintaining an establishment for monuments.	2,016	2,016	1,338	Do.
Do.	Kochrab Paldi	Small stone mosque	25	25	25	Do.
Do.	Adalaj	Stepped well	40	40	39	Do.
Do.	Dholka	Bahlol Khan Qazi's mosque	40	40	38	Do.
Do.	Do.	Khan Masjid	80	80	79	Do.
Do.	Do.	Khan tank	100	100	100	Do.
Do.	Viramgam	Mansar tank	60	60	59	Do.
Do.	Vasna	Azam Khan Muazzam Khan's tomb	40	40	40	Do.
Do.	Isanpur	Small stone mosque south of Malik Isan-ul-Mulk's tomb and mosque.	60	60	60	Do.
Do.	Vatwa	The tomb	90	90	90	Do.
Kaira and Panch Mahals.	Sojali	Tomb of Saif-ud-din and Nizam-ud-din	172	172	172	Do.
Do.	Mehmedabad	Bhamaria well	150	150	150	Do.
Do.	Bavka	The temple	25	25	25	Do.
Do.	Champaner	Archæological Buildings	1,963	1,963	1,740	Do.
Surat and Broach.	Broach City	Jami Masjid	162	162	132	Do.
Do.	Ditto	The Dutch tombs	35	35	35	Do.
Do.	Olpad, Dhao	Vaux's tomb	35	35	35	Do.
Do.	Rajgiri (Suvali)	The tomb	10	10	10	Do.
Do.	Surat	The English cemetery	449	449	298	Do.
		Carried over	..	..	5,319	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	5,319	
		BOMBAY PRESIDENCY—*contd.*				
		NORTHERN DIVISION—*contd.*				
		Annual Repairs (recurring charges) —contd.				
Surat and Broach.	Surat	The Dutch and Armenian cemeteries	255	255	175	Completed.
Thana	Thana	The graves of English Factors	10	10	8	Do.
Do.	Kalyan	Motabar Khan's tomb and Kali Masjid	24	24	24	Do.
Do.	Ambarnath	The temple	35	35	35	Do.
Do.	Mahuli	The fort	80	80	45	Do.
Do.	Nanaghat	The Brahamanical caves	15	15	*Nil.*	
Do.	Vasheli	The caves	15	15	8	Completed.
Do.	Bassein	The fort	342	342	79	Do.
Do.	Arnala	The fort	60	60	60	Do.
Do.	Barat Hill	The caves	75	75	75	Do.
Do.	Andheri	Jogesvari caves	68	68	65	Do.
Do.	Do.	The Kondivta caves	54	54	54	Do.
Do.	Borivli	Mandapesvara caves	95	95	94	Do.
Do.	Kanheri	The caves	190	190	189	Do.
Do.	Bandra	The fort	40	40	40	Do.
Presidency	Gharapuri	The caves, piers, etc.	3,194	3,194	3,218	Do.
Do.	Do.	Police Chowki and watchman's quarters.	18	18	18	Do.
Do.	Do.	Assistant Custodian's quarters	18	18	18	Do.
Do.	Do.	Custodian's quarters	112	112	112	Do.
Kolaba	Korlai	The fort	50	50	43	Do.
Do.	Alibag	The fort	175	175	174	Do.
Do.	Do.	The Hirakot Buildings	150	150	144	Do.
Do.	Revdanda	Monuments in the fort	530	530	288	Do.
Do.	Agarkot	Portuguese remains	595	595	262	Do.
Do.	Peth	The Kotali fort	70	70	75	Do.
		Carried over	..	..	10,622	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward .	..	..	10,622	
		BOMBAY PRESIDENCY—*contd.*				
		NORTHERN DIVISION—*contd.*				
		Annual Repairs (recurring charges) —contd.				
Kolaba .	Ambinli . .	The caves	60	60	43	Completed.
Do. .	Pala . .	Ditto	40	40	40	Do.
Do. .	Kuda . .	Ditto	50	50	50	Do.
Do. .	Raigarh . .	Sri Sivaji's samadhi and Mahadeva's temple.	165	165	159	Do.
Do. .	Nagothana .	The Muhammadan Bridge . .	400	400	364	Do.
		Total Annual Repairs (Northern Division).	..	..	11,260	
		CENTRAL DIVISION.				
		Special Repairs (non-recurring charges).				
Poona .	Bhaja . .	Caves. (Total expenditure up to date is Rs. 4,518.)	4,535	349	354	Completed.
Do. .	Karla . .	Caves, surveying expenses for Special Repairs.	115	76	76	Do.
Sholapur .	Sholapur . .	The old Chalukyan temple the fort. (Total expenditure up to date is Rs. 8,723.)	9,810 (Revised)	1,600	1,590	In progress.
		Total Special Repairs (Central Division)	..	..	2,020	
		Annual Repairs (recurring charges).				
East Khandesh	Patna . .	Mahesvara Mahadeva temple . .	56	56	57	Completed.
Do. .	Do. . .	Sringar Chavdi	78	78	78	Do.
Do. .	Do. . .	Nagarjuna caves	80	80	79	Do.
Do. .	Do. . .	The caves (Sita's Nahani) . . .	80	80	80	Do.
Do. .	Waghli . .	Mudhai Devi temple . . .	80	80	82	Do.
Do. .	Sangamesvara .	Old temple of Mahadeva . . .	44	44	44	Do.
		Carried over .	..	..	420	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	420	
		BOMBAY PRESIDENCY—*contd.*				
		CENTRAL DIVISION—*contd.*				
		Annual Repairs (recurring charges)—contd.				
East Khandesh	Dighi	The temple of Devi and Sambha	35	35	33	Completed.
Do.	Changdeva	The temple of Changdeva	154	154	154	Do.
Do.	Erandol	Pandava's Wada (Masjid)	160	160	161	Do.
West Khandesh	Balsana	The temple caretaker's pay	36	36	36	Do.
Nasik	Sinnar	Gondeshvara temple	300	300	300	Do.
Do.	Do.	Aisvara temple	60	60	60	Do.
Do.	Pathardi	Pandu Lena caves	350	350	350	Do.
Do.	Ankai	The caves	273	273	273	Do.
Do.	Jhodga	The temple of Mankeshvara Siva	96	96	96	Do.
Do.	Anjaneri	The temple	100	100	100	Do.
Do.	Ambegaon	The temple	51	51	51	Do.
Ahmednagar	Ahmednagar	Damri Masjid	32	32	32	Do.
Do.	Do.	Faria Bagh Palace	228	228	228	Do.
Do.	Dhoka	The caves at Dhokesvara	24	24	24	Do.
Do.	Mandavgaon Katrabad.	The temple of Devi	24	24	24	Do.
Do.	Karjat	Mallikarjuna temple	32	32	32	Do.
Do.	Pedgaon	Bablesvara temple	24	24	24	Do.
Do.	Thahakari	Tripad Srinivasa temple of Bhavani	10	10	10	Do.
Do.	Harischandragad	The caves and temple	10	10	10	Do.
Do.	Ratanwadi	The temple of Amritesvara	10	10	10	Do.
Do.	Kokamthan	The old temple	96	96	96	Do.
Do.	Bamni	Hemadpanti tank	22	22	22	Do.
Poona	Karla	The caves	1,015	1,015	1,014	Do.
Do.	Bhaja	Ditto	283	283	284	Do.
Do.	Bedsa	Ditto	143	143	144	Do.
		Carried over	..	..	3,988	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward .	..	..	3,988	
		BOMBAY PRESIDENCY—*contd.*				
		CENTRAL DIVISION—*concld.*				
		Annual Repairs (recurring charges)—contd.				
Poona .	Junnar . .	The caves	868	868	838	Completed
Do. .	Do. . .	Habshi Gumbaz . . .	200	200	191	Do.
Do. .	Ghatghar . .	The caves	50	50	50	Do.
Do. .	Shelarwadi .	Ditto	160	160	160	Do.
Do. .	Lohagarh . .	The fort	240	240	240	Do.
Do. .	Rajmachi . .	Ditto	200	200	199	Do.
Do. .	Visapur . .	Ditto	160	160	160	Do.
Do. .	Khed . .	Dilawar Khan's tomb . . .	308	308	301	Do.
Do. .	Fulgaon . .	Peshwa's bathing ghat . . .	150	150	150	Do.
Do. .	Sinhagarh . .	The fort	125	125	125	Do.
Do.	Koregaon . .	The monument	67	67	66	Do.
Government House.	Poona . .	The Shanwar Wada	1,854	1,854	1,735	Do.
Do. .	Do. . .	Kotwal's residence	..	..	16	Do.
Do. .	Do. . .	Old European tombs. . . .	38	38	38	Do.
Do. .	Bhamburda .	The Patalesvara caves . . .	269	269	266	Do.
Do. .	Pratapgarh .	Tomb of Afzal Khan . . .	9	9	5	Do.
Satara .	Jakhinwadi .	The Buddhist caves	96	96	96	Do.
Do. .	Karanja . .	Brick column erected by Aurangzeb .	9	9	9	Do.
Sholapur .	Sholapur . .	The fort	640	640	640	Do.
		Total Annual Repairs (Central Division).	..	..	9,273	
		SOUTHERN DIVISION.				
		Special Repairs (non-recurring charges).				
Bijapur .	Bijapur . .	Gagan Mahal. (Total expenditure up-to date is Rs. 7,564.)	5,091 5,662	2,320	2,374	In progress.
Do. .	Do. . .	Paying compensation for land taken up for the diversion of Station road at Bijapur.	*3,004	2,245	2,245	Completed.
		Carried over	..	..	4,619	

* Amount fixed by the Court against Rs. 759 fixed previously.

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	4,619	
		BOMBAY PRESIDENCY—*contd.*				
		SOUTHERN DIVISION—*contd.*				
		Special Repairs (non-recurring charges)—contd.				
Bijapur	Bijapur	Gol Gumbaz	110	110	98	Completed.
Do.	Do.	Asar Mahal—terrace roof and ornamental ceiling.	746	746	150	In progress.
Do.	Do.	Bukhari Masjid—a portion of the arched dalan.	134	134	120	Completed.
Do.	Navaraspur	Sangit Mahal	5,986	2,000	2,013	In progress.
Do.	Do.	Sangit Mahal—paying compensation for land taken up.	6,611	4,755	5,118	Completed.
Do.	Ainapur	Begam's Mahal—acquisition of land for open space.	125	125	148	Do.
Do.	Ibrahimpur	Excavating earth round the well	118	118	118	Do.
		Total Special Repairs (Southern Division).	..	..	12,384	
		Annual Repairs (recurring charges).				
Bijapur	Bijapur, Aiholi and Pattadkal.	Archæological Buildings in the District	2,125	2,125	2,007	Completed.
Do.	Ditto	Establishment for the up-keep of Archæological Buildings in the District.	5,892	5,892	5,309	Do.
Belgaum	Deogaon	Jain temple	30	30	30	Do.
Dharwar	Amargol	Shankar linga temple	11	11	11	Do.
Do.	Bankapur	Nagareshvara temple	32	32	32	Do.
Do.	Unkal	Four porched temple (Chandramaulesvara).	7	7	7	Do.
Do.	Haveri	Siddhesvara temple	15	15	15	Do.
Do.	Balambid	Kalmesvara temple	40	40	40	Do.
Do.	Hangal	Old ruined temple between fort and tank.	45	45	44	Do.
Do.	Naregal	Sarvesvara temple	12	12	11	Do.
Do.	Chowdhanpur	Muktesvara temple	25	25	24	Do.
Do.	Galagnath	Galgesvara temple	45	45	45	Do.
Do.	Rattihalli	Kadambesvara temple	25	25	25	Do.
		Carried over	..	..	7,600	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	7,600	
		BOMBAY PRESIDENCY—*contd.*				
		SOUTHERN DIVISION—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Dharwar	Lakhundi	Kumbhargiri temple	24	24	24	Completed.
Do.	Do.	Namesvara temple	15	15	12	Do.
Do.	Do.	Jain Basti	15	15	15	Do.
Do.	Do.	Kasivisvesvara temple	25	25	25	Do.
Do.	Gadag	Sarasvati temple	20	20	20	Do.
Do.	Do.	Somesvara temple	30	30	30	Do.
Do.	Dambal	Somesvara temple	15	15	12	Do.
Do.	Do.	Dodda Basvana temple	15	15	17	Do.
Ratnagiri	Vijayadurg	The fort	490	490	490	Do.
Do.	Malwan	Sindhudurga (fort)	225	225	222	Do.
Do.	Jaigarh	The fort wall	150	150	150	Do.
Do.	Harnai	Suvarnadurga (fort)	150	150	110	Do.
Do.	Dabhol	The mosque	150	150	136	Do.
Kanara	Kumta	The tombs on the right side of the Manki-Kumta road.	10	10	9	Do.
Do.	Do.	The figure of a tiger opposite the English School.	5	5	5	Do.
Do.	Mirjan	The fort	50	50	50	Do.
Do.	Do.	Two inscriptions in the compound of the District bungalow and the figure of a tiger.	10	10	10	Do.
Do.	Bhatkal	Jattappa Naikan Chandranathesvara Basti.	15	15	15	Do.
Do.	Do.	The European tombs	10	10	9	Do.
Do.	Sonda	The King's seat	20	20	15	Do.
Do.	Do.	The temple close to the south of the King's seat.	15	15	15	Do.
Do.	Bilgi	Small deserted temple dedicated to Siva	10	10	10	Do.
Do.	Somsagar	Siva's temple	10	10	10	Do.
Do.	Gersappa	Chaturmukha Basti	50	50	47	Do.
Do.	Do.	Vardhamana Swami's temple	20	20	19	Do.
Do.	Do.	The Virbhadra temple	20	20	19	Do.
Do.	Do.	The inscriptions	5	5	5	Do.
		Total Annual Repairs (Southern Division).	..	..	9,101	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		BOMBAY PRESIDENCY—*contd.*				
		INDUS RIGHT BANK DIVISION.				
		Special Repairs (non-recurring charges).				
Western Nara	Mohenjodaro	Mohenjodaro ruins (Site No. 1). Archæological excavations. (Total expenditure up to date is Rs. 5,499.)	8,894	5,499	5,499	In progress.
Do.	Do.	Mohenjodaro ruins (Site No. 2). Archæological excavation. (Total expenditure up to date is Rs. 2,090.)	9,844	2,090	2,090	Do.
Do.	Do.	Mohenjodaro ruins (Site No. 3). Archæological excavation. (Total expenditure up to date is Rs. 790.)	1,379	790	790	Do.
Do.	Do.	Mohenjodaro ruins (Survey of the site)	488	388	388	Completed.
Do.	Mohenjodaro and Dalorejodaro.	Mohenjodaro and Dalorejodaro (Survey of the site).	100	100	92	Do.
Do.	Khudabad	Jami Masjid. (Total expenditure up to date is Rs. 2,140.)	2,561	490	488	In progress.
Karachi Canals	Makli Hills	Archæological remains on Makli Hills. (Total expenditure up to date is Rs. 4,274.)	14,240	61	61	Do.
		Total Special Repairs (Indus Right Bank Division).	..	..	9,408	
		Annual Repairs (recurring charges).				
Karachi Buildings.	Hyderabad (Sind)	Gulam Shah Kalhora's tomb	135	135	135	Completed.
Do.	Do.	Ghulam Nabi Kalhora's tomb	120	120	120	Do.
Do.	Do.	Sarfaraz Khan Kalhora's tomb	170	170	170	Do.
Do.	Do.	Haram of Mirs in the fort	24	24	24	Do.
Do.	Gidu Bunder	Memorial pillar	27	27	27	Do.
Karachi Canals	Makli Hills Tatta.	Monuments at Tatta and Makli Hills	661	661	640	Do.
Western Nara	Khudabad	The Jami Masjid	202	202	202	Do.
Do.	Do.	Yar Muhammad Khan's tomb and Masjid	236	236	237	Do.
Do.	Mohenjodaro	Mohenjodaro (caretaker's pay)	64	64	64	Do.
Ghar Canal	Ratodaro	Rato Bhando (tomb)	147	147	112	Do.
Shikarpur Canals.	Rohri	Satyan-jo-than	212	212	211	Do.
		Total Annual Repairs (Indus Right Bank Division).	..	..	1,942	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		BOMBAY PRESIDENCY—*concld.*				
		INDUS LEFT BANK DIVISION.				
		Special Repairs (non-recurring charges)	*Nil.*	*Nil.*	*Nil.*	
		Annual Repairs (recurring charges).				
Eastern Nara	Khau-jo-daro, ½ mile to the north of Mirpurkhas.	Buddhist stupa	205	205	192	Completed.
Do. .	Naokot . .	The fort	71	71	51	Do.
Do. .	Umarkot . .	Ditto	582	582	567	Do.
Fuleli Canals .	Gajahead . .	The Buddhist stupa	33	33	22	Do.
Northern District Jamrao Canals.	Dalore . .	Brahmbra-ka-Thul	183	183	182	Do.
Nasrat Canals	Thulmir Rukan .	The Buddhist stupa . . .	11	11	10	Do.
Do. .	Kubo Nur Muhammad.	Tomb of Nur Muhammad Kalhora .	119	159	117	Do.
		Total Annual Repairs (Indus Left Bank Division).	..	..	1,141	

Summary.

Division.	Special Repairs.	Annual Repairs.
	Rs.	Rs.
Northern Division	24,906	11,260
Central Division	2,020	9,273
Southern Division	12,384	9,101
Indus Right Bank Division . .	9,408	1,942
Indus Left Bank Division . . .	..	1,141
Total .	48,718	32,717
GRAND TOTAL .	81,435	
Add Departmental Charges on pro-rata basis.	19,764	
GRAND TOTAL FOR THE BOMBAY PRESIDENCY.	1,01,199	

APPENDIX A—*contd.*

Statement showing the expenditure on Archæological works during 1922-23 in Bihar and Orissa and Central Provinces and Berar.

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		BIHAR AND ORISSA.				
		Special Repairs (non-recurring charges).				
		Gandak Circle.				
Champaran .	Lauriya Nandangarh.	Asoka pillar: repairing iron fencing, including painting. Enclosure paving also repaired.	217	217	149	Completed.
Do. .	Nandangarh .	Conservation of the mound: cutting jungle and providing notice board.	45	45	49	Do.
Do. .	Sagardih . .	Ditto ditto .	35	35	34	Do.
Do. .	Kessaria . .	Ditto ditto .	65	65	68	Do.
Do. .	Jankigarh . .	Ditto ditto .	15	15	15	Do.
Muzaffarpur .	Koluha . .	Asoka pillar: repairs to base and providing notice board.	25	23	23	Do.
Saran . .	Manjhi . .	Old fort: silt clearance from underground passage in the ramparts and providing a notice board.	107	107	83	Do.
		Orissa Circle.				
Cuttack .	Jajpur . .	Marhatta bridge at—	685	685	—6 (*minus*).	Completed in 1921-1922. A sum of Rs. 6 which was outstanding against the contractor was received in 1922-1923.
Puri . .	Bhubaneswar .	Temple at—. Works include provision of expanded metal doors with iron frames for the openings in the shrines, extension of compound walls, resetting of stone in a temple roof, etc.	3,777	576	380	In progress.
		Western Circle.				
Palamau .	Palamau . .	Forts at—. Jungle clearing round the walls. Materials for the repairs such as surkhi and lime have been collected.	4,411	2,480	1,996	Do.
		Eastern Circle.				
Bhagalpur .	Colgong and Patharghata.	Conservation of rock sculptures . .	131	131	75	Do.
Do. .	Colgong . .	Rock temple, providing notice board and constructing footpath to the—.	86	86	9	Do.
		Carried over .	..	..	2,875	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanction-ed esti-mate.	Allot-ment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward .	..	..	2,875	
		BIHAR AND ORISSA—*contd.*				
		Special Repairs (non-recurring charges)—contd.				
		Eastern Circle—contd.				
Patna . .	Patna City . .	Mosque of Begu Hajjam at Khaja Kalan — repairing cracks in arches and roof; doors; floors; surkhi plaster on damaged walls; white washing; uprooting trees and renewing a portion of verandah roof, etc.	570	400	405	In progress.
Do. . .	Rajgir and Nalanda.	Providing notice boards at the sites .	102	..	*45 i.e., Rajgir 10, Nalanda 35.	Do.
Do. . .	Nalanda . .	Conservation of excavated monuments by Archæological Superintendent.	..	7,500	5,095	Do.
Do. . .	Do. . .	Construction of godown and chaukidars' quarters.	..	1,754	1,619	Completed.
		Total Special Repairs .	..	..	10,069	
		Annual Repairs (recurring charges).				
		Gandak Circle.				
Champaran .	Lauriya Nandangarh.	Asoka pillar	15	15	13	Completed.
Do. .	Gobindganj Lauriya Araraj.	Ditto	14	14	14	Do.
Do. .	Rampurwa .	Ditto	15	15	14	Do.
Muzaffarpur .	*Majorganj .	Soldiers' tomb	55	55	39	Do.
Saran . .	Chapra . .	Ditto	10	10	9	Do.
Do. . .	Revelganj . .	Ditto	10	10	9	Do.
Do. . .	*Baragaon . .	Ditto	26	26	26	Do.
		Orissa Circle.				
Balasore .	Balasore Town .	Two Dutch tombs at — . . .	15	15	14	Completed.
Cuttack .	Jajpur . .	Ancient monuments at — . . .	15	15	15	Do.
Do. .	Cuttack . .	Barabati Fort.—Mosque and moat walls	95	60	53	Do.
Do. .	Do. . .	Barabati Fort gateway . . .	10	10	10	Do.
		Carried over .	..	..	216	

* The cost of repairs to these tombs was met from Provincial Revenues.

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward .	..	..	216	
		BIHAR AND ORISSA—*contd.*				
		Annual Repairs (recurring charges)—contd.				
		Orissa Circle—contd.				
Puri . .	Khurda Gurjang .	Monuments to the officers and men who fell in the Khurda rebellion 1804.	10	10	8	Completed.
Do. . .	Bhuvaneswar .	Temple; and Khandagiri and Udayagiri Hill caves.	260	179	77	In progress.
Do. . .	Do. . .	Ditto Q/R from April to June 1922.	199	81	81	Completed.
Do. . .	Konarak . .	Temple at Konarak	468	401	311	In progress.
Do. . .	Do. . .	Ditto Q/R from April to June 1922.	541	89	89	Completed.
Do. . .	Do. . .	Sculpture shed at—	50	50	37	Do.
Do. . .	Bhuvaneswar .	Asoka inscription in Dhauli Hills .	25	20	15	In progress.
		Western Circle.				
Hazaribagh .	Chatra . .	Q/R to Soldiers' tomb at—(Monument No. 61).	10	10	5	Completed.
Do. .	Hazaribagh .	Major Roughsedge's monument at— .	10	10	7	Do.
Sambalpur .	Sonepur . .	Tomb of Amelia, wife of Captain Russel (Monument No. 76).	10	10	10	Do.
		Eastern Circle.				
Monghyr .	Monghyr Fort .	Tomb of Pir Shah Nafa, whitewashing and petty repairs to —.	100	100	90	Do.
Do. .	Monghyr . .	Fort gates, bridges, replacing decaying roof beams.	250	250	249	Do.
Patna . .	Bankipur . .	Gola (Granary)—whitewashing, colour washing, and repairs to floor.	100	100	92	In progress.
Do. . .	Gulzarbagh. .	Agam Kuan	10	10	*Nil.*	Not yet taken up.
Do. . .	Bihar . . .	Syed Ibrahim's tomb; whitewashing 2 coats, uprooting trees and plants, repairing plaster of enclosure wall and petty masonry work, etc.	40	40	40	Completed.
Do. . .	Rajgir . . .	Maniyar, Math — replacing notice board, clearing jungle, zinc painting, iron railing.				
		Carried over .	..	..	1,327	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward .	..	..	1,327	
		BIHAR AND ORISSA—*contd.*				
		Annual Repairs (recurring charges)—contd.				
		Eastern Circle—contd.				
Patna . .	Rajgir . .	Temple of Mahadeo, Vaibhar Hill (whitewashing, repairing jhundi and roof, cutting jungle and clearing compound; setting up stone boulders along fencing; and carriage of materials).	40	40	12	Completed.
Do. . .	Do. . .	Old Jain temple—leak repairs to Naria tiled roof, renewing wall plate of Sal wood and coal tarring, etc.	20	20	13	Do.
Do. . .	Old Rajgir . .	Repair of wall enclosing "shell" inscription on rocky pathway at —. (Building rubble stone masonry in lime mortar, repairing coping, painting and refixing iron gate, etc.)	300	300	173	In progress.
Do. . .	Maner . .	Tombs of Shah Makhdum Daulat and Ibrahim Khan (Pay of work establishment, collection of materials, lime and surkhi plastering and painting, etc.).	341	341	171	Do.
Do. . .	Nalanda . .	Upkeep of Museum and bungalow at —(by Archæological Superintendent).	..	600	573	
Santal Parganas.	Rajmahal .	Juma Masjid at Hadaf. (Repairs to domes and cutting jungle). Bridge at Hadaf. Renewing lime pointing, cutting jungle and renewals of gravel on approach roads. Maina Bibi's tomb (cutting jungle).	160	160	125	Completed.
		Son Circle.				
Gaya . .	Shamshernagar .	Shamsher Khan's tomb at—(clearing jungle, repairs to brick masonry and lime plaster, uprooting jungle and vegetation in walls, etc.).	71	71	50	In progress.
Do. . .	Chenjan . .	Buddha statue shed at — (chocolate painting and whitewashing, etc.).	19	19	13	Do.
Do. . .	Guneri . .	Ditto ditto	25	25	19	Do.
Shahabad .	Rohtasgarh. .	Rohtasgarh Fort (clearing jungle) .	308	308	308	Completed.
Do. .	Sassaram . .	Sher Sur Shah's tomb — (clearing jungle and cleaning well).	74	74	74	Do.
Do. .	Do. . .	Hasan Sur Shah's tomb — (clearing jungle).	197	198	138	Do.
		Carried over .	..	..	2,996	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward .	..	..	2,996	
		BIHAR AND ORISSA—*concld.*				
		Annual Repairs (recurring charges)—concld.				
		Son Circle—contd.				
Shahabad .	Sassaram . .	Alwal Khan's tomb — (jungle clearing)	18	19	18	Completed.
Do. .	Do. . .	Salim Shah's tomb — (jungle clearing)	19	19	17	Do.
Do. .	Shergarh . .	Shergarh Fort—(cutting jungle, removing débris, clearing silt from well and propping broken beam of gate).	169	210	195	Do.
Do. .	Chainpur . .	Bakhtiyar Khan's tomb — (clearing jungle).	148	184	102	Do.
Do. .	Do. . .	Mundeshwari temple—(crack repairs and other petty items).	40	50	40	Do.
Do. .	Buxar . .	Fort bastions—(Lime pointing, filling cracks with cement, chocolate painting, wood work and clearing grass. Metal collected at road side for repair).	350	434	212	In progress.
Do. .	Do. . .	Buxar tombs—(whitewashing and clearing site).	16	16	16	Completed.
Do. .	Do. . .	Katkauli tombs—(washing and clearing tombs and petty repairs to compound wall).	6	6	6	Do.
Do. .	Do. . .	Monument in battle-field—(washing tablets with soap and clearing grass).	41	51	38	Do.
Do. .	Do. . .	Arrah House—(repairs to terraced roof and ladder at top; changing burgas, renewing iron chain, easing and repairing doors, cement pointing in ceiling, lime plastering, cutting grass and clearing the ground around.	99	99	77	Do.
Do. .	Deo Bonarak .	Sculpture shed at—. (Painting iron railing and repairing doors).	16	15	6	Do.
Do. .	Arrah . .	(*a*) Soldiers' tomb at—. (Colour washing, black painting of railing and removing roots).	6	5	5	Do.
		Total Annual Repairs .	..	..	3,728	
		Total Special Repairs .	..	..	10,069	
		Total Annual Repairs .	..	..	3,728	
		Add Departmental Charges at 24 per cent. on work executed by Public Works Department.	..	..	1,539	
		GRAND TOTAL FOR BIHAR AND ORISSA	..	..	15,336	

(*a*) Repaired from Provincial Funds.

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanction-ed esti-mate.	Allot-ment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		CENTRAL PROVINCES AND BERAR.				
		Special Repairs (non-recurring charges).				
Akola . .	Sahanoor . .	Narnala Fort at —. Conservation .	3,111	1,988	1,988	Completed.
Do. . .	Belapur . .	Fort at —. Conservation of walls and well inside.	8,700	311	278	In progress.
Amraoti .	Lasur . .	Anandeswar temple at —. Reconstruction of stepped plinth.	2,132	810	762	Completed.
Bilaspur .	Pali . . .	Mahadeo temple at —	121	29	45	Do.
Do. .	Arbhar . .	Temple at —	365	82	159	Do.
Do. .	Ratanpur . .	Kanthi Dewal temple at — . .	349	130	108	Do.
Do. .	Semarsol . .	Pali inscription stone; construction of a shelter for preserving the —.	123	123	151	Do.
Buldana .	Sindkhed Raja .	Stone masonry bund of large tank to the west of; certain improvements to —.	1,428	1,117	995	In progress.
Chhindwara .	Deogarh . .	Deogarh Fort — jungle clearance .	·3,412	1,000	1,063	Completed.
Nagpur .	Ghogra and Khapa (Katol).	Mahadeo temple at —. Conservation.	911	388	168	In progress.
Nimar . .	Asirgarh . .	Fort at — removing jungle . .	1,551	570	567	Completed.
Do. . .	Do. . .	Jami Masjid at —. Replacing broken brackets and chajja stones, etc.	6,431	1,800	2,170	In progress.
Do. . .	Burhanpur .	Fort at —. Repairing damaged walls, roofs, etc.	1,680	1,200	882	Completed.
Do. . .	Do. . .	Tomb of Nadir Shah at —. Conservation of —.	9,775	1,500	1,648	In progress.
Raipur . .	Sirpur . .	Constructing a shelter for the protection of the sculptures at —.	4,349	2,039	1,530	Do.
Saugor . .	Khimlassa . .	Old mosque and Idgah, etc. Replacing broken gate and chajja, providing notice board, stone in lime masonry, renewing stone floor, etc., and jungle clearing.	2,436	520	520	Completed.
		Total Special Repairs .	..	..	13,034	
		Annual Repairs (recurring charges).				
Akola . .	Balapur . .	Fort	100	49	13	Completed.
Do. . .	Do. . .	Chhatri	50	32	13	Do.
		Carried over .	..	..	26	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward .	..	..	26	
		CENTRAL PROVINCES—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Akola . .	Barsi Takli .	Bhawani temple	50	52	..	Work not done this year.
Do. . .	Shahanoor . .	Narnalla Fort	500	320	137	Completed.
Do. . .	Patur . .	Caves	50	62	6	Do.
Amraoti .	Amner . .	Tomb of Lal Khan	184	123	146	
Do. .	Chikalda . .	Gawilgarh Fort —Clearing of grass and jungle growth and petty repairs.	615	518	425	
Do. .	Do. . .	Tomb of Lieutenant P. Young . .	12	12	10	
Do. .	Lasur . .	Anandeshwar temple	100	64	18	
Balaghat .	Sonkhar . .	Fortress	31	25	14	Completed.
Do. .	Madanpur . .	Yogi Mandir	12	10	8	Do.
Do. .	Konasgarh . .	Fort Allahadal	62	50	47	Do.
Do. .	Piparwara in Biha Tehsil.	Old temple	12	10	10	Do.
Do. .	Baihar . .	Temple	31	25	25	Do.
Do. .	Langi . .	Fort	62	50	50	Do.
Do. .	Garhi . .	Fort	12	10	10	Do.
Bilaspur .	Pali . . .	Mahadeo temple — eradicating rank vegetation, etc.	40	20	18	Do.
Do. .	Janjgir . .	Small temple	40	20	12	Do.
Do. .	Do. . .	Large Vaishnava temple . . .	40	20	18	Do.
Do. .	Kharod . .	Brick temple of Sawari . . .	8	8	11	Do.
Do. .	Do. . .	Small brick temple	3	3	2	Do.
Do. .	Do. . .	Old Suraj temple	..	15	14	Do.
Do. .	Do. . .	Two inscriptions inside the Lakmaneshwar temple.	2	2	2	Do.
Do. .	Ratanpur . .	The doorway built into the ruined wall beside the north gateway; carved stones and images, etc.	..	20	42	Do.
		Carried over .	..	..	1,051	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	1,051	
		CENTRAL PROVINCES—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Bilaspur	Ratanpur	Monuments in the area round the town	..	20	12	Completed.
Do.	Do.	Kanthi Dewal temple	10	10	19	Do.
Do.	Do.	Mosekhan's Dargah	..	5	2	Do.
Do.	Do.	Badiinath temple Qila	..	10	15	Do.
Do.	Do.	Madarbada	..	5	5	Do.
Do.	Arbhar	Temple	50	20	33	Do.
Do.	Shoori Narain	Temple	35	20	15	Do.
Do.	Do. do.	Inscription built into the wall of the Chandra Chura temple (Mahadeo).	15	10	10	Do.
Do.	Do. do.	Ruined brick temple — (Kesho Narain)	35	20	18	Do.
Do.	Bamhu	Temple	..	12	10	Do.
Do.	Gatora	Temple	..	10	9	Do.
Do.	Belpan	Temple	..	10	..	
Do.	Patgaon	Temple	..	10	9	Completed.
Do.	Malhar	Image of Parvati	..	5	..	
Do.	Kamptee	Temple of Shankerji — clearance of rank vegetation, etc.	..	10	15	Completed.
Do.	Khaira Saitganga	Temple of Ramchandra Swamy	..	10	9	Do.
Do.	Semarsal	A stone with Pali inscription	5	5	5	Do.
Do.	Chandrapur	Temple of Mahadeo	..	15	8	Do.
Do.	Kanki (Korba)	Ditto	..	15	..	
Do.	Kundarma (Korba)	A walled enclosure containing 3 tombs of Kabir Panthi Satgurus.	..	30	26	Completed.
Do.	Pondikoh Chhuri	Kosiagarh	..	15	12	Do.
Do.	Close to Badgera	Chaitargarh	..	20	19	Do.
Do.	Dhanpur	Rock	..	5	5	Do.
Do.	Bagdera	Lafa Fort	..	25	20	Do.
Do.	Ramgarh	Fort	..	25	..	Do.
Do.	Kotmi	Fort	..	25	20	Do.
		Carried over	..	..	1,347	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward .	..	..	1,347	
		CENTRAL PROVINCES—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Bilaspur .	Near Baragawan .	Kotgarh	..	20	..	
Do. .	Malhar . .	Fort	..	20	19	Completed.
Do. .	Bawan Badi .	Kasigarh Fort	..	20	..	
Do. .	Konar . .	Konargarh Fort	..	20	27	Completed.
Do. .	Bilaspur . .	Fort	..	30	..	
Do. .	Amanala . .	Ajmergarh Fort	..	5	..	
Buldana .	Sindkhed Raja .	Well near Chandni Talao	25	31	12	
Do. .	Do. .	Stone masonry bund of the big tank .	30	37	55	
Do. .	Sakegaon . .	Old temple of Mahadeo	40	50	28	
Do. .	Satgaon . .	Old temple of Vishnu	50	62	41	
Do. .	Do. . .	Images in the vicinity of the old temple of Vishnu.	40	50	24	
Do. .	Dhotra . .	Three old temples at —	100	124	123	
Do. .	Kathauli . .	Two old temples, one inside and the other outside the village.	50	62	71	
Do. .	Rohinkhed .	Mosque at —	40	50	24	
Do. .	Mehkar . .	Madha monuments at —	50	62	43	
Chanda . .	Chanda . .	Deity slab	6	..	3	
Do. . .	Do. . .	Gond Raja's tomb	173	..	14	
Do. . .	Do. . .	Monuments of officers who fell in the siege of Chanda City No. 6.	36	..	..	
Do. . .	Do. . .	Fort walls	495	..	500	
Do. . .	Do. . .	Mahadeo temple at Municipality Office.	7	..	3	
Do. . .	Do. . .	Pasly monument	5	..	3	
Do. . .	Do. . .	Temple of Ekvira	46	..	10	
Do. . .	Do. . .	Temple of Someshwar	29	..	14	
Do. . .	Do. . .	Temple of Ganpati at Balajipeth .	35	..	18	
		Carried over .	..	..	2,379	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	2,379	
		CENTRAL PROVINCES—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Chanda	Chanda	Temple of Maruti at Bhanapurpeth	29	..	15	
Do.	Do.	A well in form of Sankh in Indiamahalpura.	17	..	10	
Do.	Lalpeth	British monuments at—	23	..	..	
Do.	Do.	16 colossal stone images of Ravan, etc.	58	..	39	
Do.	Ghogus	Stone cave with an image of Balaram within it and stone pillars in front.	6	..	..	
Do.	Ballarpur	Fort	58	..	..	
Do.	Do.	Ramtirth at—	12	..	..	
Do.	Dewalwara	Old fort ruined temple	12	..	10	
Do.	Do.	Mahadeo temple	6	..	..	
Do.	Khateva (Gondwara).	Remains of old fort	23	..	..	
Do.	Keslabori	Carved figures of 2 warriors in a ruined temple.	6	..	..	
Do.	Bhandak	Taka Talao	23	..	16	
Do.	Do.	Bhijasom cave	5	..	4	
Do.	Do.	Temple of Paresnath	17	..	..	
Do.	Do.	Chandika Devi	17	..	..	
Do.	Do.	Stone bridge in a tank	3	..	3	
Do.	Do.	Badrinath temple	58	..	..	
Do.	Do.	Bhawani cave	6	..	5	
Do.	Do.	A long high knoll	6	..	5	
Do.	Do.	Remains of three old temples	12	..	10	
Do.	Bhatala	Mahadeo temple at—	14	..	..	
Do.	Neri	Ditto	21	..	..	
Do.	Arsoda	Stone circle	20	..	..	
Do.	Markandi	Mahadeo temple at—	18	..	10	
		Carried over	..	..	2,506	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	2,506	
		CENTRAL PROVINCES—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Chanda	Wairagarh	Temple of Bhadreshwar	58	..	50	
Do.	Murumgaon	Fortress of Tipagarh	115	..	99	
Do.	Zarapapra	Rock cave at —	54	..	53	
Do.	Kadholi	Temple of Kharusalia Deo	58	..	50	
Do.	Deotak	Asoka slab inscription	7	..	7	
Do.	Thanegaon	Temples : one big and one small	18	..	..	
Do.	Armori	Temple shrines in a row	23	..	20	
Do.	Dhanosa	Hemadpanthi temple containing 3 images.	23	..	..	
Do.	Maroda	A small cave-like temple with an image of Mahadeo in the centre and numerous other images.	23	..	..	
Do.	Naleshwar	Hemadpanthi temple of Mahadeo	23	..	20	
Do.	Ghosari	Ditto ditto	12	..	..	
Do.	Do.	An ancient temple of Mahadeo	12	..	10	
Do.	Bhijgaon	Temple of Mahadeo	12	..	10	
Do.	Chandpur	Ditto	6	..	5	
Do.	Churul	Temple of Keshonath	2	..	2	
Do.	Jaunna	Old temple at —	58	..	10	
Do.	Rajgarh	Temple of Mahadeo	23	..	20	
Do.	Warha	Ditto	35	..	..	
Do.	Mahadwari	Mahadeo temple	17	..	..	
Do.	Waghmukh	Ditto	17	..	..	
Do.	Nandikesara	Ditto	12	..	..	
Do.	Nandhala	Ramdaji temple	17	..	..	
Do.	Georara	A hill crowned with remains of several temples.	12	..	20	
Do.	Palabaras	An old Hemadpanthi temple	12	..	22	
Do.	Chamursi	A group of 20 cromlechs	30	..	30	
		Carried over	..	..	2,934	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	2,934	
		CENTRAL PROVINCES—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Chhindwara	Deogarh	Fort	35	35	9	
	Nilkanthi	Temple				
Damoh	Damoh	Sculptures at Phutera tank	199	199	163	
Do.	Do.	Slabs in Deputy Commissioner's garden.				
Do.	Kundalpur	Jain temples on the Hill (1 to 42)				
Do.	Do.	Jain temples below the Hill (1 to 16)				
Do.	Do.	A flat roofed temple below the Hill				
Do.	Notha	Temple				
Do.	Ranjnagar	Fort				
Do.	Hatta	Sakhar temple				
Do.	Do.	Matha at Ranch				
Do.	Do.	Rang Mahal Palace				
Do.	Kodal	Old temple				
Do.	Narsinghgarh	Mosque				
Do.	Jata Shankar	Fort				
Do.	Kanorabar	Temple				
Drug	Deo Balode	Siva temple—jungle clearing and petty repairs to fencing.	20	20	20	
Do.	Gandai	Old temple—jungle clearing and tightening wire fencing.	20	20	16	
Do.	Dhamda	Temple of Siva on Buddha tank—clearing grass and repairs to pointing.	10	10	8	
Jubbulpur	Bheraghat	Temple of Gauri Shankar				
Do.	Do.	Temple of Chausat Jogini				
Do.	Karanpur Karitalai	Temple and Tumuli and a linga of Sheo				
Do.	Karitalai	Varaha				
Do.	Do.	Kach and Mach				
		Carried over	..	..	3,150	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanction-ed esti-mate.	Allot-ment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	3,150	
		CENTRAL PROVINCES—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Jubbulpur	Tegowa	Kankali Devi temple				
Do.	Nanhora	Temple of Siva	343	343	288	
Do.	Bilheri	Vishnu Varaha temple				
Do.	Garha	Panch Matha				
Do.	Burgaon	Temple of Somnath				
Do.	Padaria	Rupnath (Asoka inscription)				
Do.	Panagarh	Large effigy of Vishnu Varaha				
Nagpur	Junapani	Stone circle — removal of rank vegetation and repairs to masonry work.	20		20	Completed.
Do.	Ubali and Peth Ubali.	Stone circle at —	15		15	Do.
Do.	Ghogra	Mahadeo temple at —	15		..	
Do.	Ramtek Hill	Remains of old shrine	25		..	
Do.	Dongartal	Fort	175	651	121	Completed.
Do.	Nagardhan	Fort	180		128	
Do.	Takalghat	Mahabir temple	15		10	Completed.
Do.	Do.	Mari Devi temple	15		15	Do.
Do.	Watheda	Stone circle	35		25	Do.
Do.	Nildon	Ditto	30	..	25	Do.
Narsinghpur	Chowragarh	Temple in the Fort	47	47	38	
Raipur	Arang	Jain temple	15	15	15	Completed.
Do.	Sirpur	Laxman temple	30	30	30	Do.
Do.	Do.	Monuments in area round the village	15	15	15	Do.
Saugor	Saugor	Satgarh in Government Forest				
Do.	Garhpahra	Fort (Mahal)				
Do.	Dhamoni	Fort				
Do.	Do.	Tomb of Baljati Shah				
		Carried over	..	..	3,895	

APPENDIX A—*contd.*

District. (P. W. D.)	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	3,895	
		CENTRAL PROVINCES—*concld.*				
		Annual Repairs (recurring charges)—concld.				
Saugor	Dhamoni	Rani Mahal				
Do.	Eran	Ruined temples				
Do.	Bamora	Temple				
Do.	Khimlassa	Tomb of Panj Pirs	738	738	591	
Do.	Do.	Old mosque, etc.				
Do.	Rahatgarh	Fort				
Do.	Chandrapur	Temple of Mata Bad in the Government Forest site.				
Do.	Pali	Temple of Mahadeo				
Do.	Deori	Fort				
Do.	Gadoli Jawaher	Buddhist temple				
Do.	Gourjhamar	Fort				
Do.	Karonda	Temple of a Mahadeo or Mata				
Yeotmal	Lohara	Mahadeo temple	31	31	17	
		Total Annual Repairs	..	..	4,503	
		Total Special Repairs	..	..	13,034	
		Total Annual Repairs	..	..	4,503	
		Add Departmental Charges at 23 per cent.	..	..	4,034	
		GRAND TOTAL FOR THE CENTRAL PROVINCES AND BERAR.	..	..	21,571	

APPENDIX A—*contd.*

Statement showing the expenditure on Archæological works during 1922-23 in Bengal and Assam.

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	Remarks.
			Rs.	Rs.	Rs. A. P.	
		BENGAL.				
		Special Repairs (non-recurring charges).				
Dacca	Lalbagh	Refixing the stone slabs of the platform around the tomb of Bibi Peri.	120	120	113 2 0	Completed.
Do.	Do.	Special repairs to old Fort	1,507	1,507	1,492 3 0	Do.
Do.	Rajabari	Special repairs to Math	355	341	320 4 0	Do.
Do.	Satmasjid and Rampal.	Fitting and fixing notice boards in the Satgumbaz mosque at Satmasjid and Raja Harish Chandra's tank at Rampal.	50	..	22 12 0	Do.
Mymensingh	Astagram	Earth filling in the compound and repairs to the main gate of Qutab mosque.	136	136	135 7 0	Do.
Bakarganj	Masjidbari	Certain additional repairs to the mosque.	869	433	313 0 0	Do.
Malda	Gaur	Providing wire fencing to the compound of the Gumti gateway.	818	700	545 0 0	Almost completed.
Do.	Do.	Special repairs to the Gumti gateway	1,566	240	148 0 0	Completed.
Do.	Do.	Special repairs to Darasbari Masjid	1,950	1,095	1,090 0 0	Do.
Do.	Do.	Special repairs to Chamkatti Masjid.	1,235	968	895 0 0	Almost completed.
Do.	Do.	Rain damage repairs to the Gumti gateway.	360	360	293 0 0	Completed.
Bogra	Mahasthangarh	Fixing notice board at the mound	38	..	34 0 0	Do.
Rajshahi	Bagha	Repairs to the main building and the compound wall of the mosque.	1,158	888	888 0 0	Do.
Birbhum	Nanoor	Special repairs to group of temples in the compound of the Basuli temple.	1,388	450	390 0 0	In progress.
Murshidabad	Katra	Special repairs to tomb and mosque of Murshid Kuli Khan.	2,092	1,156	721 0 0	Completed.
Bankura	Vishnupur	Special repairs to the 19 temples in and near Vishnupur.	11,120	5,100	5,097 9 3*	In progress.
Do.	Bahulara	Special repairs to Siddhesvar temple	6,023	2,000	1,698 2 0*	Do.
Midnapur	Gaganesvar	Karambera Fort	2,875	1,488	1,099 11 0*	Do.
		Supply of notice boards to a few protected monuments in Bengal.	..	800	768 6 0*	Do.
		Total Special Repairs	..	..	16,064 8 3	

* Undertaken by the Archæological Department

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs. A. P.	
		BENGAL—*contd.*				
		Annual Repairs (recurring charges).				
Hooghly	Chinsurah	Cemetery (Dutch portion)	69	..	62 0 0	Completed.
Do.	Serampore	Danish cemetery	20	..	16 0 0	Do.
Do.	Do.	Henry Martin's Pagoda	164	165	136 0 0	Do.
Do.	Saptagram	Mosque and tomb	52	50	48 0 0	Do.
Do.	Tribeni	Mosque and tomb of Zafar Khan Gazi.	63	165	69 0 0	Do.
Burdwan	Kalna	Mosque	75	..	73 0 0	Do.
Do.	Do.	Mosque and tomb of Majlish Saheb				
Do.	Buddipur	Two ancient temples	35	41	36 0 0	Do.
Do.	Burdwan	Tombs of Sher Afghan, Behram Sakka and Kutub-ud-din.	65	63	75 0 0	Do.
Do.	Bamoonara	Rarhesvar Siva temple	100	83	83 0 0	Do.
Do.	Gaurangpur	Temple of Ichaighosh	192	165	165 0 0	Do.
Birbhum	Sanatore (near Suri).	Temple of Damodar	40	41	29 0 0	Do.
Do.	Kenduli	Temple of Radha Benode (known as Joydeb).	40	41	32 0 0	Do.
Nadia	Plassey	New Plassey monument	39	41	39 0 0	Do
Do.	Do.	Pillars demarcating the battle-field.	50	50	50 0 0	Do.
Do.	Chakdah	Palpara temple	63	83	59 0 0	Do.
Murshidabad	Dadpur	Tomb of Mirmadan	12	13	12 0 0	Do.
Do.	Katra	Tomb of Azimunnessa Begum	24	25	23 0 0	Do.
Do.	Nazimabagh	Tomb of Sarfaraj Khan	8	8	7 0 0	Do.
Do.	Khoshbagh	Mausoleum of Alivardi Khan	12	12	12 0 0	Do.
Do.	Do.	Tomb of Sirajuddoulla				
Do.	Roshnibagh	Tomb of Suja-ud-din	8	8	8 0 0	Do.
Do.	Jaffarganj	Tomb of Mirjafar	2	2	2 0 0	Do.
Do.	Kunjaghata	Tablet of Maharaja Nanda Kumar	2	2	2 0 0	Do.
Do.	Kharaul	Mosque	188	124	144 0 0	Do.
		Carried over	..	..	1,182 0 0	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs. A. P.	
		Brought forward ..	..	..	1,182 0 0	
		BENGAL—*concld.*				
		Annual Repairs (recurring charges)—concld.				
Murshidabad .	Jaffarganj . .	Dewan Khana of Mirjafar . .	147	413	141 0 0	Completed.
Do. .	Kalikapur . .	Old Dutch cemetery	30	30	59 0 0	Do.
Do. .	Rangamati .	Devil's mound and Raja Karna's palace.	32	83	68 0 0	Do.
Bankura .	Vishnupur .	19 temples in and near Vishnupur .	685	566	449 0 0	Do
Do. .	Shushunia Hill .	Rock inscription of Raja Chandra Varman.	25	21	15 0 0	Do.
24-Parganas .	Sundarbans .	Joter Deul temple	237	237	192 0 0	Do.
Malda . .	Gaur and Pandua	Archæological buildings . .	2,458	2,500	2,470 5 3	Do.
Rajshahi .	Bagha . . .	Mosque	149	200	149 0 0	Do.
Do. .	Kusumba . .	Do.	182	200	182 0 0	Do.
Dacca . .	Dacca . .	Mosque at Lalbagh	164	180	128 3 0	Do.
Do. . .	Do. . .	Tomb of Bibi Peri	71	120	58 13 0	Do.
Do. . .	Do. . .	Remains of old Fort at Lalbagh .	416	600	340 13 0	Do.
Do. . .	Do. . .	Hussaini Dalan	495	600	487 3 0	Do.
Do. . .	Do. . .	Dewan Bazar mosque in the Dacca College compound.	43	120	31 9 0	Do.
Do. . .	Munshiganj .	Old fort known as Killa Kidderpore .	200	200	175 13 0	Do.
Do. . .	Magrapara . .	Tomb of Ghias-ud-din Azam Shah .	54	54	46 0 0	Do.
Mymensingh .	Agarsindur .	Shah Mahmud mosque . . .	20	30	18 2 0	Do.
Do. .	Do. .	Sadi mosque	80	25	45 1 0	Do.
Do. .	Astagram .	Kutub mosque	29	136	27 4 0	Do.
Do. .	Masjidpara .	Aurangzeb mosque	15	15	14 6 0	Do.
Bakarganj .	Masjidbari .	Mosque	28	50	20 0 0	Do.
Khulna .	Bagerhat . .	Satgumbaz mosque and Khan Jehan Ali's tomb.	536	{ 200 250 }	482 0 0	Do.
		Total Annual Repairs .	..	..	6,782 8 3	
		Total Special and Annual Repairs	..	..	22,847 0 6	
		Add Public Works Department charges at 21 per cent. over Rs. 14,184.	..	..	3,546 0 0	
		GRAND TOTAL FOR BENGAL .	..	..	26,393 0 6	

Appendix A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	Remarks.
			Rs.	Rs.	Rs. A. P.	
		Assam.				
		Special Repairs (non-recurring charges).				
Sibsagar .	Nazira . .	Garhgaon palace of the Ahom kings .	1,437	1,089	1,082 0 0	In progress.
Do. .	Sibsagar . .	Runghar ruins	883	870	858 0 0	In progress (supplementary estimate has been asked for).
Darrang .	Tezpur . .	Collection of ancient sculptures and carved stones in the Municipal Park.	3,086	2,272	2,144 0 0	Completed.
Do. .	Bishnath . .	Bordole temple	1,912	179	12 0 0	Do.
Naga Hills .	Dimapur . .	Monolithic remains	624	892	615 0 0	Not yet completed.
		Total Special Repairs .	..	..	4,711 0 0	
		Annual Repairs (recurring charges).				
Sibsagar .	Sibsagar . .	Three temples at Gourisagar . .	141		132 0 0	Completed.
Do. .	Do. . .	Three temples at Joysagar . .	242		282 0 0	Do.
Do. .	Do. . .	Three temples at Sibsagar . .	290		289 0 0	Do.
Do. .	Do. . .	Runghar ruins at Joysagar . .	49	1,225	79 0 0	Do.
Do. .	Do. . .	Kararnghar ruins at Joysagar .	307		307 0 0	Do.
Do. .	Do. . .	Golaghar or Magazine at Joysagar .	122		121 0 0	Do.
Do. .	Do. . .	Garhgaon palace of the Ahom kings at Nazira.	185		185 0 0	Do.
Darrang .	Bishnath . .	Bordole temple	66	66	25 0 0	Do.
Do. .	Tezpur . .	Clearing jungle round the temple on Bamuni Hill.	75	75	74 0 0	Do.
Naga Hills .	Dimapur . .	Dimapur ruins	420	420	417 0 0	Do.
Cachar . .	Khaspur . .	Kachari ruins	275	275	271 0 0	Do.
Do. .	Maibong . .	Rock-cut temple and two inscribed stones.	10	10	9 12 0	Do.
		Carried over ..	..	..	2,191 12 0	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs. A. P.	
		Brought forward	..	..	2,191 12 0	
		ASSAM—*concld.*				
		Annual Repairs (recurring charges)—concld.				
Khasi and Jaintia Hills.	Khasi and Jaintia Hills.	Ancient monuments and buildings of historical interest.	50	50	50 0 0	Completed.
Kamrup	Kamakhya	Duarganga rock inscription at the foot of Kamakhya Hill.	10	10	10 0 0	Do.
Gauhati	Gauhati	Carving inscription on the Urbasi island.	10	10	9 0 0	Do.
Do.	Do.	Rock sculpture of Vishnu Janardan	30	30	30 0 0	Do.
Goalpara	Jogighopa	Two caves	20	20	20 0 0	Do.
Sylhet	Jaintiapur	Repairs to enclosure wall of Jaintiapur Nizpat.	100	100	91 0 0	Do.
Do.	Badarpur	Old Fort	20	20	20 0 0	Do.
		Total Annual Repairs	..	..	2,421 12 0	
		GRAND TOTAL (SPECIAL AND ANNUAL REPAIRS).	..	..	7,132 12 0	
		Add Departmental Charges at 38 per cent.	..	..	2,714 10 0	
		GRAND TOTAL FOR ASSAM	..	..	9,847 6 0	

APPENDIX A—*contd.*

Statement showing the expenditure on Archæological works during the year 1922-23 in the Madras Presidency and Coorg.

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs. A. P.	
		MADRAS PRESIDENCY.				
		Special Repairs (non-recurring charges).				
Vizagapatam .	Sankaram .	Buddhist Remains—Repairs to the watcher's shed.	60	60	60 0 0	Work completed.
Kistna .	Masulipatam (Bandar).	Building known as Port and Customs Office including Arsenal and Armoury in Bandar Fort—Repairs to walls, roof and doors.	8,450	..	272 0 0	Do.
Do. .	Do. .	Belfry and compound wall at Bandar Fort—Rebuilding portions of the compound wall and removing vegetation.	1,700	531	371 0 0	Do.
Do. .	Gudivada .	Mound containing Buddhist Remains—Fixing demarcation stones round the site.	13	..	1 0 0	Do.
Guntur .	Motupalle .	Virabhadra Chola temple—Repairs to wall with inscriptions, roof, floors and doorways.	940	500	491 0 0	Do.
Do. .	Bhattiprolu .	Remains of Buddhist Stupa—The brick mound was cleared of rank vegetation and a notice board provided.	115	115	83 0 0	Do.
Anantapur .	Kambaduru .	Siva temple—Special repairs . .	60	60	54 0 0	Do.
Do. .	Anantapur .	Sir Thomas Munro's house—Special repairs.	65	65	2 0 0	In progress.
Do. .	Penukonda .	Citadel and ruined buildings—Providing doors and windows, etc.	830	..	2 0 0	
Do. .	Do. .	Gagan Mahal—Providing doors and windows.	760	420	420 0 0	Work completed.
Bellary .	Vijayanagar .	Vitthala temple—Special repairs .	615	2,460	1,116 0 0	Do.
Do. .	Do. .	Hazara — Ramachandra temple—Special repairs.	215	215	21 0 0	Do.
Do. .	Do. .	Ruined tank adjoining Soolai Bazaar .	220	271	139 0 0	Do.
Do. .	Do. .	Roads and pathways	450	554	223 0 0	In progress.
Chittoor .	Melpadi .	Somanatha temple—Special repairs .	10	10	10 0 0	Completed.
Do. .	Gurramkondo .	Fort—Special repairs	100	100	100 0 0	Do.
Do. .	Chandragiri .	Fort and Palace—Provision of a gate and pillars.	60	100	50 0 0	Do.
Cuddapah .	Cuddapah .	Nawab's Tower—Provision of new notice boards and patch plastering to towers.	125	125	69 0 0	Do.
Kurnool .	Kurnool .	Special repairs to Panikididdi gateway .	720	750	651 0 0	Do.
		Carried over .	..	..	4,135 0 0	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs. A. P.	
		Brought forward	..	..	4,135 0 0	
		MADRAS PRESIDENCY—*contd.*				
		Special Repairs (non-recurring charges)—concld.				
Kurnool	Kurnool	Abdul Wahab Khan's tomb—Repairs to walls and providing a wooden gate.	30 18	30 18	30 0 0 18 0 0	Completed. Do.
Chingleput	Mahabalipuram	Clearing and dressing the ground north of Krishna mandapa.	125	125	116 0 0	Do.
South Arcot	Gingee	Fort and other buildings—Special repairs.	21,600	2,425	2,433 0 0	Do.
Do.	Porto Novo	Roman Catholic Portuguese Church—Special repairs.	3,750	125	128 0 0	Do.
Madura	Dindigul	Rock fort buildings—Special repairs	900	900	897 4 0 189 13 0	Do.
Tinnevelly	Tuticorin	Dutch cemetery—Special repairs to the damaged marble Tomb No. 18.	330	415	282 0 0	
Do.	Shermadevi	Bakthavatsala temple—Removal of vegetation.	15	..	7 8 0	
Tanjore	Negapatam	Dutch cemetery—Repairs to compound wall and certain tombs.	430	150	152 0 0	
Do.	Tiruvadavayil	Punyanatha Siva temple—Special repairs to floors, walls and refixing pillar in mandapa.	600	600	584 0 0	
Do.	Tranquebar	Dansborg—Special repairs	765	..	48 0 0	
		Total Special Repairs	..	..	9,020 9 0	
		Annual Repairs (recurring charges).				
Ganjam	Pandya (Jaugada)	Asoka rock inscriptions—Repairs to wall and tarring iron and wood work.	25	25	23 5 0	Work in progress.
Do.	Kottakolla	Siva temple on Brudhakholla Hill	80	80	81 8 8	Work completed. No contribution paid.
Vizagapatam	Sankaram	Buddhist Remains—Annual repairs	50	50	50 0 0	
Do.	Do.	Buddhist Remains—Maintenance of a watcher.	144	144	143 0 0	
Do.	Ramatirtham	Buddhist Remains—Maintenance of a watcher.	144	144	144 0 0	
Kistna	Adimalle	Group of stone images—Removal of vegetation.	75	75	63 0 0	
Do.	Guntapalle	Buddhist Monuments—Removal of vegetation.	35	35	30 0 0	
Do.	Pedavegi	Ancient Mounds—Annual repairs	45	45	44 0 0	
Do.	Arugolem	Buddhist Mound—Providing notice board.	8	3	3 0 0	
		Carried over	..	..	581 13 8	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.			REMARKS.
			Rs.	Rs.	Rs.	A.	P.	
		Brought forward	..	..	518	13	8	
		MADRAS PRESIDENCY—*contd.*						
		Annual Repairs (recurring charges)—contd.						
Kistna	Bezwada	Two-called shrine at the foot of the Indrakila Hill—Removing vegetation and silt.	2	2	2	0	0	
Do.	Do.	Akkanna-Madanna Temple—Removing vegetation, clearing site and repairing steps.	2	2	2	0	0	
Do.	Mogalrajapuram	Rock-cut temples on the hill—Removing vegetation.	2	2	2	0	0	
Do.	Jaggayyapetta	Buddhist Stupa—Annual maintenance of a watcher.	150	36	22	0	0	
Guntur	Amaravati	Buddhist Stupa—Annual maintenance of a watcher.	100	100	98	0	0	
Anantapur	Penukonda	Annual maintenance of monuments	260	260	286	0	0	
Do.	Gooty	Rock fort buildings—Annual maintenance of a watcher.	350	350	326	0	0	Completed.
Bellary	Hampi Ruins	Annual maintenance of six watchmen for Hampi ruins.	1,193	970	915	0	0	Do.
Cuddapah	Sidhout	Fort and its buildings—Ordinary repairs	160	160	160	0	0	Do.
Kurnool	Kurnool	Abdul Wahab Khan's tomb—Whitewashing and cleaning.	80	80	80	0	0	
Madras	Madras	Obelisk standing north of western extremity of old Town wall near Basin Bridge—Annual repairs.	9	9	9	1	0	Completed.
Do.	Do.	Slab R. S. No. 1764 fixed in the basement of H. Police Station.	7	9	7	5	0	Do.
Do.	Do.	Pillar R. S. No. 1816	10	9	8	10	0	Do.
Do.	Do.	Pillar R. S. No. 1793	10	9	8	10	0	Do.
Do.	Do.	Tomb of David Yale and Joseph Hymners in the compound of Law College.	25	25	27	7	0	Do.
Do.	Do.	West Bastion room attached to the old Madras Town Wall.	55	60	54	10	0	Do.
Chingleput	Mahabalipuram	Ordinary repairs to Monuments	300	300	264	5	4	Do.
Do.	Do.	Road to Shore temple and Five Raths—Pay of watering coolies.	230	230	190	10	4	Do.
Do.	Do.	Annual maintenance of roads	1,480	1,480	1,321	0	0	Do.
Do.	Chingleput	Ther Mahal—Ordinary repairs	165	135	138	2	0	Do.
Do.	Sadras	Fort—Ordinary repairs	410	410	237	11	0	Do.
		Carried over	..	..	4,742	5	4	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs. A. P.	
		Brought forward	..	..	4,742 5 4	
		MADRAS PRESIDENCY—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Chingleput	Pulicat	Dutch cemetery in the fort—Annual repairs.	270	270	275 8 11	Completed.
Malabar	Palghat	Fort—Removing vegetation from the moat and repairs to revetment.	..	..	418 0 0	In progress.
			500	500	23 0 0	Incomplete work of last year completed in 1922-23.
Do.	Sultan's Battery	Jain temple—Removal of vegetation	25	25	25 0 0	In progress.
Do.	Tellicherry	Fort—Removal of vegetation	150	150	150 0 0	Do.
South Kanara.	Mangalore	Sultan's Battery—Clearing vegetation and plastering walls.	45	34	34 0 0	Completed.
Do.	Nada	Rock fort at Jamalabad—Clearing rank vegetation.	48	37	37 0 0	Incomplete work of last year completed this year.
Do.	Karkul	Jain statute of Gummatesvara—Pointing the walls and flooring of cut-stone with cement grouting with concrete, and clearing vegetation.	50	48	48 0 0	Do.
Salem	Sankaridrug	Hill fort—Clearing vegetation, repacking displaced wall and repairing notice board.	53	63	63 0 0	Completed.
			130	90	90 0 0	
			..	130	109 0 0	
Do.	Namakkal	Hill fort—Repairs to bastions, gateways, etc., and clearing vegetation.	140	140	128 0 0	Do.
Do.	Do.	Ranganatha temple—Repairs to rotten door frames and ordinary repairs.	75	75	75 0 0	Do.
Do.	Do.	Narasimha temple—Closing leaks and usual repairs.	45	45	41 0 0	Do.
Do.	Rayakottai	Hill fort—Removing vegetation, brick work for pillars, renewing wooden joists, grouting cracks and pointing walls, etc.	230	230	221 0 0	Do.
Do.	Krishnagiri	Hill fort—Ordinary repairs	300	300	291 0 0	Do.
Coimbatore	Kundur	Ruined Mahalingesvara temple—Refitting inscribed slabs in position, grouting voids and pointing with coloured mortar and clearing vegetation.	170	170	165 0 0	Do.
		Carried over	..	..	6,935 14 3	

Appendix A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	Remarks.
			Rs.	Rs.	Rs. A. P.	
		Brought forward .	..	..	6,935 14 3	
		Madras Presidency—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Coimbatore .	Kundur . .	Mutilated inscribed slab on the tank bund in Kollegal-Singanallur road—Repairs to masonry work and colour plastering in patches.	6	6	5 0 0	Completed.
Nilgiris .	Hullikaldrug .	Ruined fort—Clearing jungle round the fort.	25	..	20 0 0	
Do. .	Batlada Acheni .	Group of sculptured Dolmens—Clearing rank vegetation.	5	5	5 0 0	
Do. .	Banagudi .	Group of large Dolmens—Clearing rank vegetation.	66	66	66 0 0	
North Arcot .	Vellore . .	Hindu temple at fort——Annual maintenance of two watchmen.	400	300	292 0 0	
Do. .	Do. . .	Hindu temple—Clearing vegetation .	590	600	588 0 0	
Do. .	Abdullapuram .	Mahal—Removing vegetation and applying scrub eradicator.	50	50	50 0 0	
Do. .	Arcot . .	Delhi Gate—Maintenance of a watchman.	210	160	151 0 0	
Do. .	Sholavaram .	Siva temple—Repairs *nil* . .	2,780	..	386 0 0	Outlay represents value of one ton crane supplied by the P. W. Stores in August 1920 and adjusted in December 1922. Credit of value is awaited as the crane has been returned.
South Arcot .	Gingee . .	Fort and other buildings—Annual maintenance of four watchmen—				
		during 1921-22 . . .	580	..	240 0 0	
		during 1922-23 . . .	580	575	336 0 0	
Madura .	Dindigul . .	Rock fort buildings—Employment of a watchman from—				
		1st October 1921 to 30th September 1922	180	..	72 0 0	Completed.
		1st October 1922 to 30th September 1923	180	180	75 10 0	In progress.
Do. .	Vikramangalam .	Koilpatti temple—Employment of a watchman for the temple from—				
		1st February 1921 to 30th November 1922	..	..	24 0 0	Completed.
		1st December 1922 to 30th November 1923	..	..	9 0 0	In progress.
		Carried over ..	..	..	9,255 8 3	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	Remarks.
			Rs.	Rs.	Rs. A. P.	
		Brought forward	..	..	9,255 8 3	
		MADRAS PRESIDENCY—*concld.*				
		Annual Repairs (recurring charges)—concld.				
Tinnevelly	Adichanalur	Pre-historic Remains—Maintenance of a watchman—				
		for 1922	144	108	81 0 0	
		for 1923	144	..	18 0 0	Rs. 9 being the pay of a watcher for February 1923 has been paid to him on the 13th March 1923 and has been adjusted in March 1923 Supplemental through the schedule of payments from the Treasury Officer. The pay of the watcher is being disbursed by the Revenue Department and the charges included in Schedule of payments of the Treasury Deputy Collector to be adjusted in P. W. D. Accounts.
Tinnevelly	Tuticorin	Dutch cemetery—Annual repairs	195	175	155 0 0	Completed.
Trichinopoly	Tandoni	Rock-cut carvings—Removal of vegetation.	40	..	24 0 0	Do.
Do.	Valikondapuram	Valisvara temple—Ordinary repairs (1) fixing notice board (2) removing vegetation.	450	..	12 0 0	Incomplete work of last year completed this year.
Do.	Do.	Shamaskhan Mosque—Annual repairs and providing a new cut-stone pillar for notice board.	143	..	7 0 0	Do.
Do.	Vallapuram	Yaktyar Masjid and Nobihi Tomb—Annual repairs and fixing notice board.	510	..	5 0 0	Do.
Do.	Ranjangudi	Fort—Maintenance of a watchman—				
		1921-22	144	108	108 0 0	Completed.
		1922-23	144	12	36 0 0	
Tanjore	Tanjore	Sivaganga Little Fort—Annual maintenance of a watchman during—				
		1921-22	240	..	51 14 0	
		1922-23	120	240	73 9 0	
		Total Annual Repairs	..	..	9,826 15 3	
		TOTAL SPECIAL AND ANNUAL REPAIRS	..	..	18,847 8 3	
		Add Departmental Charges at 23 per cent.	..	..	4,334 0 0	
		GRAND TOTAL FOR MADRAS	..	..	23,181 8 3	

Appendix A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	Remarks.
			Rs.	Rs.	Rs. A. P.	
		PROVINCE OF COORG.				
		Annual Repairs (recurring charges).				
Coorg .	Mercara .	The Fort and Raja's Seat—Annual repairs to roads, culvert and drains inside the fort and approaches, repairs to masonry Elephants, fence, well and path; repairs to Raja's seat and clearing surroundings. A sweeper has been employed throughout the year to look after the surroundings.	240	..	247 8 5	
Do. .	Do. .	Palace—Repairs to leaks in roof, to quadrangle, to floor including patch plastering here and there and repairs to doors and windows.	221	..	80 6 1	Work completed. *N.B.*—As an expenditure of about Rs. 300 was expected to be incurred on repairs to leaks, the outlay on this item was restricted to Rs. 80 only with reference to the availability of funds.
Do. .	Mallur .	Jain Temple—Annual repairs—Plastering with mortar 2 coats, the top portion of the temple to close leaks in the terrace and clearing jungle, etc.	20	..	19 12 0	Work completed.
Do. .	Nalknad .	Nalknad Palace—Annual repairs—whitewashing, repairs to doors and windows, leaks in the roof, floor and plaster; repairs to approach road, varnishing furniture and washing linen, repairs to pipe line cistern, etc.	270	..	256 3 0	A watchman has been employed throughout the year to look after the building and furniture.
		Add Departmental Charges at 23 per cent.	..	..	138 0 0	
		GRAND TOTAL FOR COORG .	..	..	741 13 6	

APPENDIX A—*contd.*

Statement showing the expenditure on Archæological monuments in Burma during the year 1922-23.

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
		BURMA.	Rs.	Rs.	Rs.	
		Special Repairs (non-recurring charges).				
Myingyan .	Minnanthu . .	Sulamani Pagoda at Minnanthu .	11,425	5,444	4,642	
	Pagan . .	Tilominlo Pagoda at Pagan . .	30,434	14,423	14,516	
Mandalay .	Mandalay . .	*Pyatthats* on the walls of Fort Dufferin at Mandalay.	31,227	6,000	3,109	
	Do. . .	Constructing garden on the palace platform at Mandalay.	89,850	22,600	13,175	
	Do. . .	Removing earth from the sides of the palace at Mandalay.	356	356	355	
	Do. . .	To meet the excess expenditure incurred on archæological works at Mandalay during 1921-22.	..	631	..	
Akyab . .	Mrohaung . .	Shitthaung temple at Mrohaung .	15,078	2,500	4,367	The people of Mrohaung contributed Rs. 2,700 during the year 1922-23.
		Total Special Repairs .	..	..	40,164	
		Annual Repairs (recurring charges).				
Hanthawaddy	Syriam . .	Wages of caretaker for the old Portuguese Church at Syriam.	200	200	195	
	Mandalay . .	Palace buildings at Mandalay . .	5,000	5,000	3,482	
	Do. . .	Wages of durwans for looking after the palace at Mandalay.	3,000	3,000	2,895	
	Do. . .	Maintenance of the palace gardens at Mandalay (wages of malis and cost of seeds and implements).	1,000	1,000	..	
	Do. . .	*Pyatthats* on the walls of Fort Dufferin at Mandalay.	3,000	3,000	3,966	
	Do. . .	Remains of Atumashi *Kyaung* at Mandalay.				
	Do. . .	Shwenandaw *Kyaung* at Mandalay .				
	Do. . .	Sangyaung Monastery at Mandalay .				
	Do. . .	Thudama *Kyaung* at Mandalay . .	1,000	1,000	1,000	
	Do. . .	Salin Monastery at Mandalay . .				
	Do. . .	Myadaung *Kyaung* or Queen's Monastery at Mandalay.				
	Do. . .	Taiktaw Monastery at Mandalay .				
		Carried over .	..	..	11,538	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	11,538	
		BURMA—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Mandalay	Mandalay	Tomb of King Mindon at Mandalay				
	Do.	Tomb of Queen Sinbyumayin at Mandalay.				
	Do.	Tomb of Medawgyil, mother-in-law of Mindon, at Mandalay.				
	Do.	Tomb of Nanmadawgyi at Mandalay				
	Do.	Tomb of Medawgyi (Laungshe Queen), Queen of Mindon, at Mandalay.	100	100	101	
	Amarapura	Tomb of Bodawpaya at Amarapura				
	Do.	Tomb of King Bagyidaw at Amarapura				
	Do.	Tomb of Shwebo Min at Amarapura				
	Do.	Tomb of King Mindon's mother at Amarapura.				
	Do.	Taungthaman Kyauktawgyi Pagoda at Amarapura.	100	100	100	
	Do.	Remains of Bodawpaya's Palace at Amarapura.	100	100	60	
Katha	Tagaung	Zina-aunggya-Shwebontha Pagoda at Tagaung.				
	Do.	Shwezigon Pagoda at Tagaung	240	240	240	
	Maingdaing	Mosudaung Pagoda at Maingdaing				
	Myadaung	Paungdaw-u Pagoda at Myadaung				
Myingyan	Myinpagan	Pawdawmu Pagoda at Myinpagan (spent Rs. 17).				
	Do.	Nagayon temple at Myinpagan (spent Rs. 165).				
	Do.	Seinnyet Nyima Pagoda at Myinpagan. } (spent Rs. 95).				
	Do.	Seinnyet Ama temple at Myinpagan. }				
	Do.	Kubyaukkyi temple at Myinpagan (spent Rs. 40).				
	Do.	Abeyadana temple at Myinpagan (spent Rs. 30).				
		Carried over	..	..	12,039	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	12,039	
		BURMA—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Myingyan	Nyaung-u	Kyanzittha's Onhmin in Nattaung Monastery at Nyaung-u (spent Rs. 32).				
	Do.	Sapada Pagoda at Nyaung-u (spent Rs. 32).				
	Do.	Thamihwet Onhmin at Nyaung-u (spent Rs. 32).				
	Do.	Hmyathat Onhmin at Nyaung-u (spent Rs. 27).				
	Do.	Kyaukku Onhmin Cave Temple at Nyaung-u (spent Rs. 32).				
	Do.	Shittaung Pagoda near Nattaung Monastery at Nyaung-u (spent Rs. 15).				
	Do.	Thetkyamuni Pagoda at Nyaung-u (spent Rs. 35).				
	Do.	Kondawgyi Pagoda at Nyaung-u (spent Rs. 30).				
	Thiyipyitsaya	Eastern Petleik Pagoda at Thiyipyitsaya.				
	Do.	Western Petleik Pagoda at Thiyipyitsaya (spent Rs. 233).				
	Do.	Lawkananda Pagoda at Thiyipyitsaya (spent Rs. 22).				
	Pwazaw	Damayazika Pagoda at Pwazaw (spent Rs. 62).				
	Minnanthu	Sulamani Pagoda at Minnanthu (spent Rs. 144).				
	Pagan	Thatbyinnyu Pagoda at Pagan (spent Rs. 120).				
	Do.	Shwegugyi Pagoda at Pagan (spent Rs. 27).				
	Do.	Bidagat Taik or Library at Pagan (spent Rs. 20).	3,500	3,500	3,303	
	Do.	Nathlaung-gyaung temple at Pagan (spent Rs. 22).				
	Do.	Ngakywe-nadaung at Pagan (spent Rs. 27).				
		Carried over	..	..	15,342	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward .	..	..	15,342	
		BURMA—*contd.*				
		Annual Repairs (recurring charges)—contd.				
Myingyan .	Pagan . .	Patothamya temple at Pagan (spent Rs. 33).				
	Do. . .	Mi-malaung-gyaung temple at Pagan (spent Rs. 27).				
	Do. . .	Gawdawpalin Pagoda at Pagan (spent Rs. 495).				
	Do. . .	Bupaya Pagoda at Pagan (spent Rs. 328).				
	Do. . .	Mahabodhi Pagoda at Pagan (spent Rs. 185).				
	Do. . .	Damayangyi Pagoda at Pagan (spent Rs. 140).				
	Do. . .	Mingalazedi Pagoda at Pagan (spent Rs. 580).				
	Do. . .	Thandawyga Image at Pagan (spent Rs. 15).				
	Do. . .	Pebingyaung Pagoda at Pagan (spent Rs. 10).				
	Do. . .	Shwesandaw Pagoda at Pagan.				
	Do. . .	Shinbinthalyaung or recumbent image of the Buddha within the precincts of the Shwesandaw Pagoda at Pagan. (spent Rs. 60).				
	Do. . .	Museum at Pagan (spent Rs. 169) .				
	Myinpagan .	Myinkaba Pagoda at Myinpagan (spent Rs. 22).				
	Do. . .	Manuha temple at Myinpagan (spent Rs. 17).				
	Do. . .	Nanpaya stone temple at Myinpagan (spent Rs. 22).				
	Pagan and neighbourhood.	Wages of durwans to look after Pagodas and Museum at Pagan and neighbourhood.	1,872	1,872	1,620	
		Carried over .	..	..	16,962	

APPENDIX A—*contd.*

District.	Locality.	Name of work and description.	Amount of sanctioned estimate.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.	REMARKS.
			Rs.	Rs.	Rs.	
		Brought forward	..	..	16,962	
		BURMA—*contd.*				
		Annual Repairs (recurring charges)—concld.				
Shwebo	Shwebo	Alaungpaya's tomb at Shwebo	20	20	6	
	Do.	Shed over inscription stone in the Court House compound at Shwebo.	10	10	4	
Sagaing	Sagaing	Tupayon Pagoda at Sagaing	135	135	132	
	Do.	Inscription shed at Sagaing	100	100	80	
	Ava	Okkyaung Monastery at Ava	200	200	185	
	Mingun	Sinbyume Pagoda at Mingun	240	240	235	
	Do.	Tazaung and Bell at Mingun	150	150	152	
	Do.	Pondawpaya or model of the Mingun Pagoda at Mingun.	50	50	46	
Kyaukse	Kalagyaung	Nandawye Pagoda at Kalagyaung				
	Do.	Let-the Pagoda at Kalagyaung				
	Do.	Chanthaya Pagoda at Kalagyaung	180	180	180	
	Ebya	Shwezigon Pagoda at Ebya				
	Metkaya	Shweyaungdaw Pagoda at Metkaya				
Prome	Hmawza	Bawbawgyi Pagoda at Hmawaz				
	Do.	Bebe Pagoda at Hmawaz	300	300	295	
	Do.	Lemyethna Pagoda at Hmawaz				
Pegu	Pegu	Pali stone shed and an old buoy at Pegu	50	50	43	
		Total Annual Repairs	..	..	18,320	
		GRAND TOTAL (SPECIAL AND ANNUAL REPAIRS).	..	..	58,484	
		Add Departmental Charges at 23 per cent.	..	..	12,447	
		Balance out of the reserve with the Local Government.	..	406	..	
		GRAND TOTAL FOR BURMA	..	..	70,931	

APPENDIX A—*contd.*

Statement showing the expenditure incurred on the conservation of monuments during the year 1922-23 in Ajmer.

District.	Locality.	Name of work and description.	Allotment for the year 1922-23.	Amount spent during the year 1922-23.
			Rs. A. P.	Rs. A. P.
	Ajmer . .	Replacing and improving the door of the Museum building.	5,848 0 0	405 12 0
		Annual repairs to Archæological buildings		481 10 0
		Maintenance of marble baradaries on Anasagar Bund.		1,952 6 4
		Replacing a wicket in the compound of the baradaries by a turnstile.		42 0 0
		Total .	..	2,881 12 4
		Public works agency charges at 24 per cent	..	703 0 0
		GRAND TOTAL .	..	3,584 12 4

Summary.

Circles.	Allotment.	Expenditure.
	Rs.	Rs. A. P.
(*a*) Director General of Archæology in India	2,05,375	1,72,157 1 5
(*b*) Superintendent, Muhammadan and British Monuments .	53,884	46,598 7 9
(*c*) Superintendent, Hindu and Buddhist Monuments . .	51,747	47,863 8 1
(*d*) Superintendent, Frontier Circle	32,779	30,573 15 2
(*e*) Superintendent, Western Circle	60,278	51,214 4 8
(*f*) Superintendent, Central Circle	55,106	46,511 8 3
(*g*) Superintendent, Eastern Circle	26,096	23,789 2 2
(*h*) Superintendent, Southern Circle	47,812	21,469 0 11
(*i*) Superintendent, Burma Circle	44,999	44,688 7 0
(*j*) Government Epigraphist for India	46,862	39,381 9 10
(*k*) Assistant Superintendent for Epigraphy, Southern Circle .	38,054	31,821 11 6
(*l*) Archæological Chemist in India	14,931	14,727 4 6
(*m*) Sir Aurel Stein	38,130	36,015 6 0
(*n*) Archæological Section, Indian Museum	36,280	33,787 3 0
GRAND TOTAL . .	7,52,366	6,43,661 10 3

APPENDIX A—*contd.*

Expenditure incurred on Conservation works, etc., by Provinces during the year 1922-23.

Provinces.	Allotment.	Expenditure.
	Rs.	Rs.
United Provinces. Muhammadan and British Monuments	1,90,000	1,71,537
United Provinces. Hindu and Buddhist Monuments		7,374
Punjab. Muhammadan and British Monuments	1,13,000	(1) 70,702
Punjab. Hindu and Buddhist Monuments		17,726
Punjab. Director General of Archæology (Taxila)	..	16,200
Delhi	1,30,000	(2) 1,38,090
North-West Frontier Province	18,000	20,576
Bombay	1,10,000	1,01,109
Bihar and Orissa	38,000	15,336
Central Provinces and Berar	40,000	21,571
Bengal	32,000	26,393
Assam	9,640	9,847
Madras	35,000	23,181
Coorg	820	741
Burma	89,000	70,931
Ajmer	5,790	3,584
Chhattarpur State	5,000	5,000
Dhar State	5,000	5,000
Sir Aurel Stein's exploration	24,000*	..
Furniture for Stein Museum, Delhi	26,850	23,259
Reserve	27,900†	..
Total	9,00,000	7,48,157

(1) Includes Rs. 20,665 for Gardens funded by the Provincial Government.
(2) Includes Rs. 13,883 for Delhi Fort Garden funded by the Provincial Government.
* Reappropriated.
† See page 272.

APPENDIX A—*concld.*

Details of allotment from Reserve 1922-23 Grant for Rs. 27,900.

	Rs.
Punjab	3,675
North-West Frontier Province	1,798
Rajputana	58
United Provinces	4,442
Delhi	4,500
Bengal	325
Chhattarpur	6,445
Indian Museum	3,500
Delhi Museum	2,000
Antiquities	250
Total	26,993

APPENDIX B.

List of Exhibits received in the Delhi Museum of Archæology during the year 1922-23.

(1) A red sand stone slab (2′ 3″ by 1′ 3½″) containing the inscription

(The holy tomb of Sayyid Ashiq Muhammad Shattar) written in Nastaliq characters. The slab was found among the débris during the excavation at Purana Qila in the year 1914.

PRESENTED.

(2) A copper vessel containing 106 copper coins found during the excavation of Block No. 159 of the New Capital City at Delhi on the 1st September 1922—Presented by the Deputy Commissioner, Delhi.

(3) A picture of the Observatory at Delhi (coloured), drawn in the last quarter of the 18th century by S. Davis—Presented by the Honourable Mr. Justice Beaufort of South Africa.

(4) A different view of the same presented by the Honourable Mr. Justice Beaufort of South Africa.

(5) Another picture of the Observatory at Delhi (coloured), drawn in the last quarter of the 18th century—Presented by the Honourable Mr. Justice Beaufort of South Africa.

(6—8) Three pictures of the Observatory at Delhi (in pencil) drawn in the last quarter of the 18th century by S. Davis—Presented by the Honourable Mr. Justice Beaufort of South Africa.

ON LOAN.

(1) A specimen of Calligraphy in Naskh characters, containing a congratulatory verse written by Prince Humayun, one of the cousins of Akbar Shah II. It was presented by the Prince to the Emperor on the occasion of the *Jashn* celebrated in honour of the recovery of the latter—On loan from the Director General of Archæology in India.

(2) A *Huqqa* of Bidri work—On loan from the Director General of Archæology in India.

(3) A *Surahi* of Bidri work—On loan from the Director General of Archæology in India.

(4) An *Ugaldan* (spittoon) of Bidri work—On loan from the Director General of Archæology in India.

APPENDIX B—*contd.*

List of Coins received for the Delhi Museum of Archæology during the year 1922-23.

From whom received.	Ruler's name.	Dynasty.	Gold.	Silver.	Copper.	Billon.	Total.
(*Presented.*)							
Director of Industries, Central Provinces, Nagpur.	Shah Jahan	Mughal .	..	1	..	..	1
Do.	Aurangzeb	Do. .	..	5	..	..	5
Do.	Shah Alam I . . .	Do. .	..	5	..	..	5
Do.	Farrukhsiyar . . .	Do. .	..	10	..	..	10
Do.	Muhammad Shah . .	Do. .	..	10	..	..	10
Do.	Malik Ambar (?) . . .	Nizam Shahi	..	..	2	..	2
Do.	Aurangzeb	Mughal .	..	14	..	..	14
Do.	Jahandar Shah . . .	Do. .	..	1	..	..	1
Chief Commissioner, Delhi.	Firoz Shah Tughlaq . .	Tughlaq .	1	..	..	..	1
Deputy Commissioner, Delhi.	Bahlol Shah Lodi . .	Lodi . .	..	..	..	47	47
Do.	Sikandar Shah Lodi . .	Do. . .	..	..	..	1	1
Do.	Husain Shah . . .	King of Jaunpur.	..	..	..	7	7
Government of the United Provinces.	Shah Alam II . . .	Mughal .	..	3	..	..	3
Do.	Farrukhsiyar . . .	Do. .	..	1	..	..	1
Do.	Muhammad Shah . .	Do. .	..	18	..	..	18
Do.	Ahmad Shah . . .	Do. .	..	5	..	..	5
Government of Bengal.	Illyas Shah . . .	Kings of Bengal.	..	2	..	..	2
Do.	Sikandar Shah . . .	Do.	..	2	..	..	2
Do.	Azam Shah . . .	Do.	..	4	..	..	4
Do.	Hamza Shah . . .	Do.	..	1	..	..	1
Do.	Bayazid Shah . . .	Do.	..	2	..	..	2
Do.	Firoz Shah ibn Bayazid Shah	Do.	..	1	..	..	1
Do.	Jalal-ud-din . . .	Do.	..	4	..	..	4
Government of the Punjab.	Shah Jahan . . .	Mughal .	..	6	..	..	6
Do.	Aurangzeb	Do. . .	..	5	..	..	5
Do.	Jahandar Shah . . .	Do. .	..	1	..	..	1
	Carried over . ..		1	101	2	55	159

APPENDIX B—*contd.*

From whom received.	Ruler's name.	Dynasty.	Gold.	Silver.	Copper.	Billon.	Total.
	Brought forward .	..	1	101	2	55	159
Government of the Punjab—*contd.*	Farrukhsiyar	Mughal .	..	1	..	..	1
Do.	Muhammad Shah . .	Do. .	..	3	..	..	3
Bombay Branch Royal Asiatic Society.	Akbar	Do. .	..	8	1	..	9
Do.	Shah Alam II . . .	Do. .	..	1	..	..	1
Do.	Shah Jahan . . .	Do. .	..	..	1	..	1
Do.	Aurangzeb	Do. .	..	..	3	..	3
Do.	Mahmud III . . .	Kings of Gujrat.	..	..	2	..	2
Do.	Ahmad III . . .	Do. .	..	..	3	..	3
	Total presented .	..	1	114	12	55	182
(*On loan.*)							
Director General of Archæology in India.	Muhammad bin Tughlaq .	Tughlaq .	3	..	..	..	3
Do.	Mahmud Shah . . .	Do. .	1	..	..	..	1
Do.	Akbar	Mughal .	..	1	..	..	1
Do.	Nur Jahan and Jahangir .	Do. .	..	2	..	..	2
Do.	Aurangzeb Alamgir . .	Do. .	..	3	..	..	3
Do.	Muhammad Shah . .	Do. .	..	19	..	..	19
Do.	Ahmad Shah . . .	Do. .	..	1	..	..	1
Do.	Shah Alam II . . .	Do. .	..	14	..	..	14
Do.	Sher Shah Suri . .	Sur . .	..	1	..	..	1
Do.	Islam Shah Suri . .	Do. . .	..	1	..	..	1
Do.	Adil Shah Suri . . .	Do. .	..	1	..	..	1
Do.	Jahangir	Mughal .	..	1	..	..	1
Do.	Shah Alam I . . .	Do. .	..	1	..	..	1
Do.	Farrukhsiyar . . .	Do. .	..	2	..	..	2
Do.	Ahmad Shah Durrani .	Do. .	..	2	..	..	2
	Total on loan .	..	4	49	..	..	53
	GRAND TOTAL .	..	5	163	12	55	235

Appendix C.

List of antiquities found at Nalanda in 1922-23. Site No. 4.

Serial No.	Date.	Position.	Depth.	Nature of earth in which found.	Class.	Description.	Remarks.
1	1922-23	I 5 b4	8′ 6″	Débris	Clay	One Nalanda seal with Dharmachakra and gazelles.	
2	1922-23	J 5 b2	4′ 3″	„	Stone	Fragment of a halo around a head of Buddha, flanked by small stupas.	
3	1922-23	I 5 c2	8′ 0″	„	Clay	One small round seal.	
4	1922-23	H 7 a1	6′ 5″	„	„	One small personal seal.	
5	1922-23	J 7 b2	3′ 11″	„	„	One small votive seal.	
6	1922-23	I 7 d3	7′ 10″	„	„	A plaque with Buddha seated in Bhumisparsa mudra in a niche flanked by stupas, the creed being written beneath the seat. Impressions of seals and flowers encircle the figure.	
7	1922-23	L 5 d3	4′ 2″	„	„	One Nalanda seal, with Dharmachakra and gazelles.	
8	1922-23	I 9 b2	7′ 3″	„	„	Two small round seals.	
9	1922-23	L 7 c1	2′ 3″	„	„	One personal seal.	
10	1922-23	O 5 a1	4′ 0″	„	„	One small earthen utensil.	
11	1922-23	I 7 b2	14′ 2″	„	Metal	One seated female figure in Vilasa (easy) posture 2½″ height.	
12	1922-23	M 5 a1	4′ 0″	„	Stone	Image of Brahma seated in Vilasa with a Kamadalu in hand 3½″ height.	
13	1922-23	I 8 c3	8′ 0″	„	Clay	Four earthen chiraghs.	
14	1922-23	R 5 a1	3′ 5″	„	„	One small earthen utensil.	
15	1922-23	H 9 b2	14′ 10″	„	Metal	One male figure seated on throne supported by two lions; 3½″ height.	
16	1922-23	I 7 c1	14′ 9″	„	Clay	Two Nalanda seals, with Dharmachakra and gazelles.	
17	1922-23	R 7 b2	3′ 9″	„	Stone	Avalokiteshara, standing, 4 armed, one Sakti erect at each side, 2½″ height.	
18	1922-23	M 5 d4	4′ 2″	„	Clay	One personal seal.	
19	1922-23	U 5 b2	13′ 10″	„	Metal	Standing female figure with flute in hand.	
20	1922-23	T 5 c4	3′ 10″	„	Stone	A small oblong tablet 3¼″×3″ inscribed in Sanskrit (Nagri) on one side as follows:—	
						Transcript :—	
						Line 1. Siddham*. Om. Namo [Bu]ddhāya yē dharmma hē.	* Denoted by a symbol.
						Line 2. tupra [bha]v [a] hétum téshān Tathāgato hya.	
						Line 3. vadat-téshāonchа† yō nirōdha ē vam vā.	†Read vadat teshān.
						Line 4. di mahāsramanah Namō ratnatra [yā] ya.	
						Line 5 dēyadharmōyam Janu (*or* nda) vāka sya yada (tra).	

APPENDIX C—*contd.*

Serial No.	Date.	Position.	Depth.	Nature of earth in which found.	Class.	Description.	REMARKS.
						Line 6. punyam tadbhava tva tv [a] chāryōpādhyāyamā.	
						Line 7. tāpitripūrvva (vvam) gam (ga) mam kritva (tva) sakala.	
						Line 8. satva-rāsī (nāma) nutta ra jnānāvāpta.	
						Line 9. yaitutih*	*Read *iti*.
						Translation :—	
						Line 1. Success ! Om. Salutation to Buddha. * * * * * * *	
						(The Buddhist creed.)	
						Line 4. Adoration to the three jewels (*viz.*, the Buddha, the Dharma and the Sangha). This is the meritorious gift of Janu (*or*)nda-vāka. May the merit of it be for the attainment of supreme knowledge first by the teachers, the religious preceptors, the mother and the father and next (after them) by the groups of sentient beings—thus.	
21	1922-23	K 5 *d*4 .	1′ 1″	Débris .	Clay .	One Nalanda seal with Dharmachakra.	
22	1922-23	M 6 *d*4 .	2′ 4″	„ .	Terra-cotta.	Fragment of a moulded brick representing a human figure.	
23	1922-23	V 7 c4 .	15′ 0″	„ .	Stone .	One slab with representations of scenes from life of Buddha. Head with upper portion gone ; 4⅛″ height.	
24	1922-23	Q 9 *d*2 .	7′ 0″	„ .	„ .	Fragment of a pedestal, with two legs of image in Vajrasana.	
25	1922-23	V 6 c3 .	15′ 3″	„ .	Metal .	One small chatra of a statue.	
26	1922-23	P 6 c3 .	3′ 1″	„ .	Terra-cotta.	Fragment of a moulded brick.	
27	1922-23	R 8 *a*1 .	4′ 5″	„ .	Clay .	One Nalanda seal with Dharmachakra.	
28	1922-23	K 9 *a*2 .	4′ 0″	„ .	„ .	One round seal.	
29	1922-23	R 9 *a*1 .	8′ 0″	„ .	Stone .	Pedestal of an image with feet and lower portion of legs in Vilasa mudra.	
30	1922-23	U 5 *d*1 .	15′ 0″	„ .	Clay .	Two Nalanda seals with Dharmachakra and gazelles.	
31	1922-23	J 9 *d*2 .	2′ 3″	„ .	Terra-cotta.	Fragment of a moulded brick.	
32	1922-23	R 5 c2 .	3′ 3″	„ .	Clay .	One round seal.	
33	1922-23	U 9 *a*1 .	3′ 2″	„ .	„ .	One personal seal.	

APPENDIX C—*concld.*

Serial No.	Date.	Position.	Depth.	Nature of earth in which found.	Class.	Description.	REMARKS.
34	1922-23	Q 9 *a*1 .	8′ 0″	Débris .	Clay .	Two round seals.	
35	1922-23	R 9 *c*3 .	7′ 6″	„ .	„ .	One small earthen utensil.	
36	1922-23	2 V 11 *d*4	2′ 3″	„ .	Terra-cotta.	12 Ushnish (Jata).	
37	1922-23	N 10 *a*1	6′ 4″	„ .	Stone .	Fragment of an image of Mahisasur Mardini (killing buffalo); very rudely cut.	
38	1922-23	T 8 *c*3 .	4′ 6″	„ .	Clay .	One Nalanda seal with Dharmachakra and gazelles.	
39	1922-23	S 9 *d*4 .	3′ 10″	„ .	„ .	One small seal.	
40	1922-23	V 10 *d*4	3′ 0″	„ .	„ .	Two round seals.	
41	1922-23	U 9 *c*3 .	4′ 0″	„ .	„ .	One oval seal.	
42	1922-23	T 7 *a*2 .	4′ 6″	„ .	„ .	One small earthen utensil.	
43	1922-23	R 10 *a*1	7′ 3″	„ .	„ .	Three chiraghs.	

With a view to facilitate the survey of the complex remains on the Nalanda site, and to the elucidation of the many separate strata and periods comprising them, a dumpy level and accessories have been acquired at a cost of Rs. 677.

If the exigencies of routine duties elsewhere permit of it, the Archæological Superintendent hopes eventually to be able to prepare a number of architectural drawings and perspectives illustrating a restoration of the succession of monastic structures erected on the Nalanda site between the foundation of the university in the 5th-7th centuries A. D. and its final destruction at the hands of the Muhammadan invaders towards the close of the 12th century.

APPENDIX D.

Statement showing the expenditure incurred from Imperial and Dhar State funds on various buildings from April 1922 to the end of March 1923.

No.	Name of Building.	Expenditure from Imperial Grant.			Expenditure from Dhar State Funds.		
		Rs.	A.	P.	Rs.	A.	P.
	Ancient Monuments at Mandu.						
1	Jami Masjid	466	8	0	175	14	9
2	Rupmati Mahal	1,925	12	11	103	0	0
3	Baz Bahadur's Palace	609	9	11	109	4	0
4	Jahaj Mahal	891	7	9	172	6	0
5	Hoshanga's Tomb	52	8	0	151	0	0
6	Ashrafi Mahal	125	12	10	82	15	0
7	Dharamshalla	29	11	7	..		
8	Hammam	639	9	0	28	0	0
9	Hindola Mahal	594	15	9	123	8	0
10	Dilawarkhan's Mosque	150	0	0	50	0	0
11	Maliq Mughi's Mosque	72	3	10	34	0	0
12	Taweli Mahal	224	8	4	80	0	0
13	Daiki Choti Bahen-ka-Mahal	10	5	6	9	0	0
14	Delhi Gate	225	8	0	11	0	0
15	Mosque near Tarapur Gate	4	8	0	..		
16	Jali Mahal	9	0	0	..		
17	Hati Gate	..			24	0	0
18	Victory Tower	..			2	0	0
19	Chappan Mahal	..			42	0	6
20	Daryaikhan's Tomb	..			6	0	0
21	Khilji Mausoleum	..			31	0	0
22	Sarai	..			87	4	0
	Carried over	6,032	1	5	1,322	4	3

APPENDIX D—*concld.*

No.	Name of Building.	Expenditure from Imperial Grant.	Expenditure from Dhar State Funds.
		Rs. A. P.	Rs. A. P.
	Brought forward .	6,032 1 5	1,322 4 3
23	Chistikhan's Palace	..	24 0 0
24	Gadhasas shop	..	36 1 0
25	Ujal Baori	..	15 0 0
26	Andheri Baori	..	8 0 0
27	Daika Mahal	..	20 0 0
28	Songar Gate	..	12 0 0
29	Gadhasas Palace	..	13 0 0
30	Champa Baori	..	22 2 3
31	Hati Mahal	..	1 5 0
32	Lal Bungalow	..	28 0 0
33	Expenditure for caretakers	..	733 8 5
34	Establishment	..	1,631 14 0
35	Miscellaneous	..	318 0 8
	Total Mandu Buildings .	6,032 1 5	4,185 3 7
	Ancient Monuments at Dhar.		
36	Lat Masjid	..	113 6 5
37	Kamal Maula	..	128 15 6
38	Dhar Fort	..	60 0 0
39	Natnagara Buildings	..	5 0 0
	Total Dhar Buildings .	..	307 5 11
	GRAND TOTAL .	6,032 1 5	4,492 9 6

APPENDIX E.

Additions to Departmental Libraries.

Name of office.	Books purchased.	Books presented.	Total.	REMARKS.
Director General	91	67	158	A further 18 volumes and 84 journals, etc., were received as exchanges, bringing the grand total up to 260.
Northern Circle (Agra)	3	33	36	
Northern Circle (Lahore) . . .	19	35	54	
Frontier Circle	5	97	102	54 were transferred from the office of Chief Commissioner, N.-W. F. P
Western Circle	..	..	37	
Central Circle	20	26	46	
Eastern Circle	17	66	83	
Southern Circle	4	68	72	
Burma Circle	27	72	99	
Government Epigraphist . . .	29	54	83	
Assistant Superintendent for Epigraphy, Southern Circle.	30	80*	110	* 57 books were received from the Director of Office Systems, Madras.
Archæological Chemist	16	107	123	
Archæological Section, Indian Museum .	..	..	119	

MSDGofA—505—11-8-25—GIPS



(a) Khairul Manazil, Delhi, before conservation.

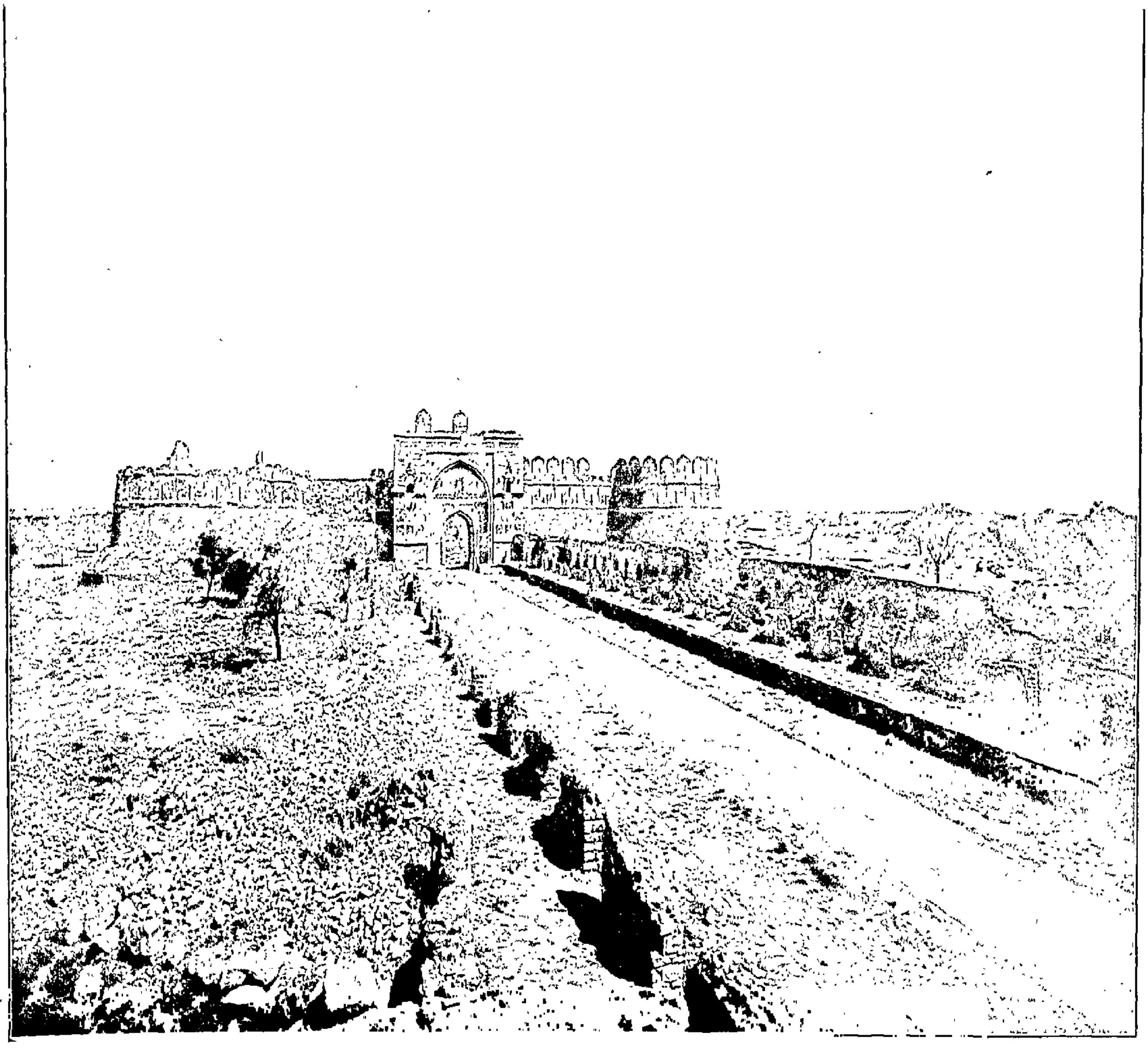


(b) Khairul Manazil, Delhi, after conservation

Photo-engraved & printed at the Offices of the Survey of India, Calcutta, 1921



(*a*) Sher Shah's Gateway, Delhi, before conservation.



(*b*) Sher Shah's Gateway, Delhi, after conservation.

Photo-engraved & printed at the Offices of the Survey of India, Calcutta, 1921



(a) Mosque at Khirki, before conservation.



(b) Mosque at Khirki, after conservation.



(a) Hansi Fort, Punjab.



(b) Kurukshetra, excavations at Raja Khan ka kila.



(a) HANSI, IMAGE OF SURYA.



(c) KANGRA, VAJRESVARI TEMPLE, DURGA SLAYING THE BUFFALO DEMON.



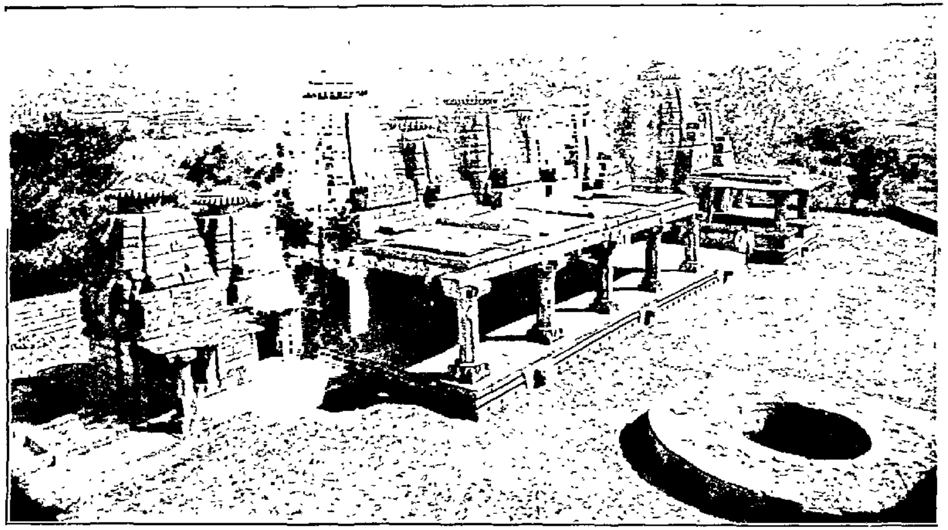
(e) AMIN, TWO SCULPTURED PILLARS.



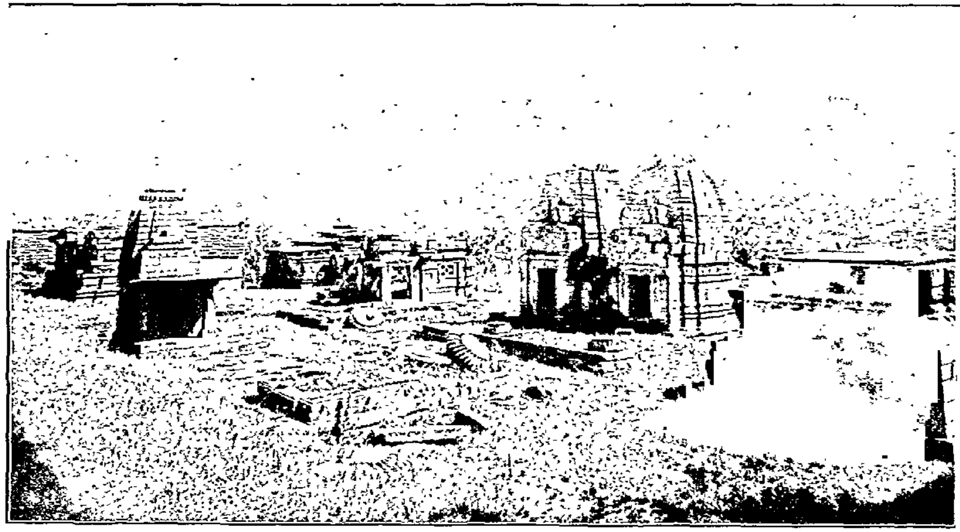
(b) KANGRA, VAJRESVARI TEMPLE, (BHAIRAVA?)



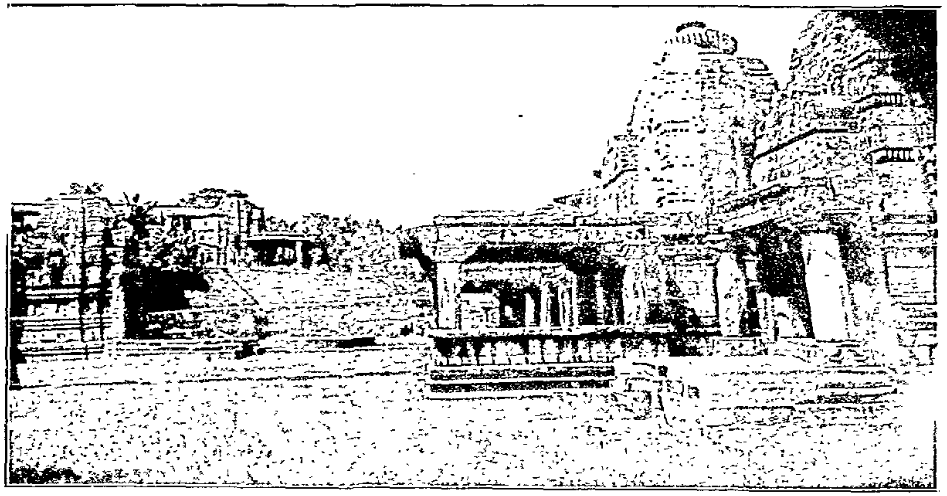
(d) KAITHAL, IMAGE OF VISHNU.



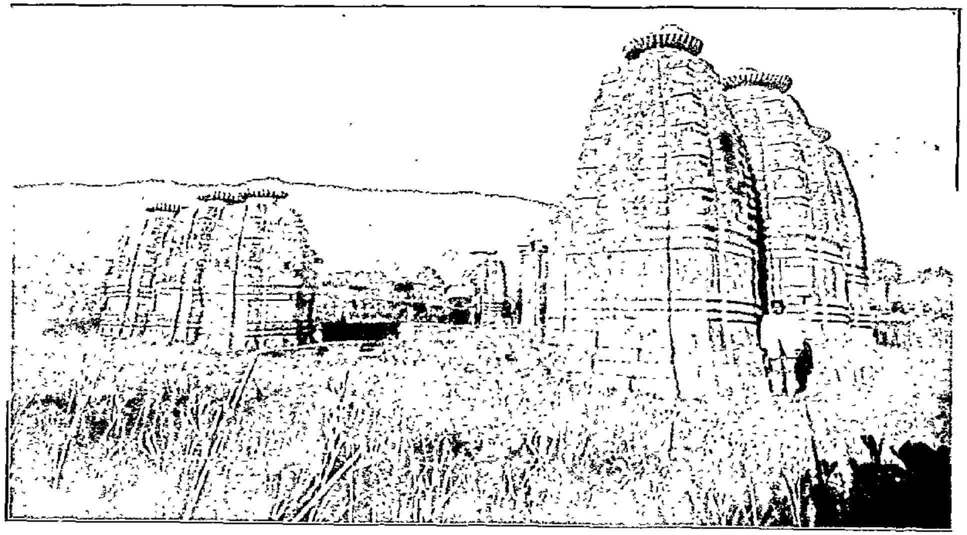
(a) DWARAHAT: TEMPLES NOS. 4-12 IN KACHERI GROUP, AFTER EXCAVATION OF COMPOUND AND CONSERVATION, FROM N.W.



(b) DWARAHAT: MANIYAN GROUP OF TEMPLES, AFTER EXCAVATION.



(c) DWARAHAT: KACHERI GROUP AFTER CONSERVATION.

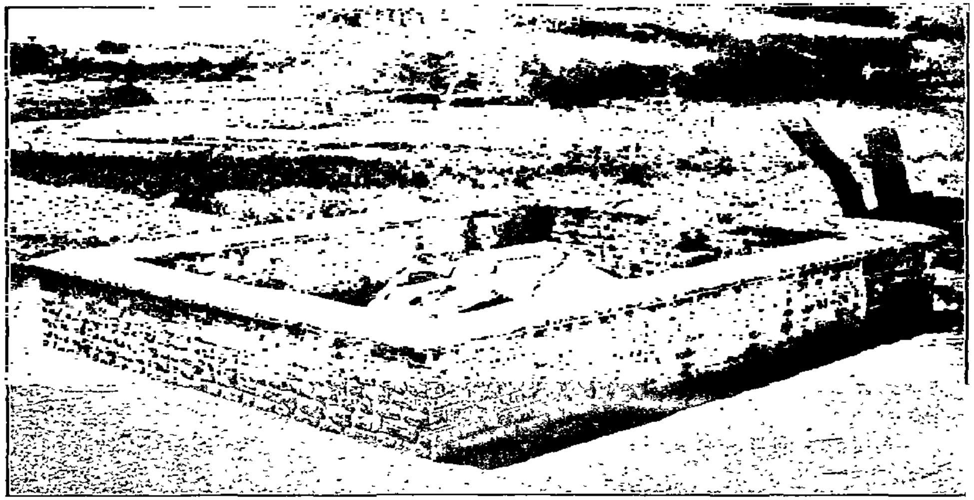


(d) DWARAHAT: RATANDEO SHRINES, FROM S.W.

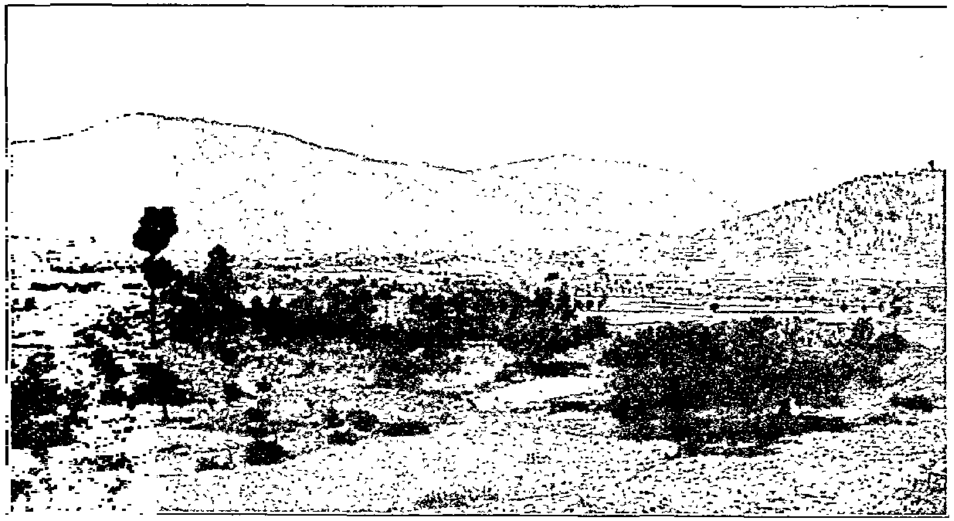
PLATE VII.



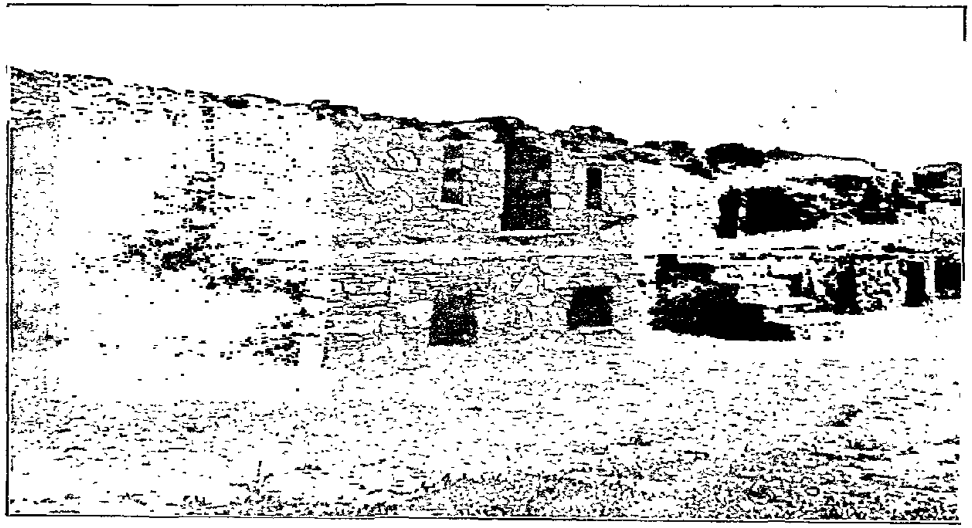
(a) SHAHBAZGARHI: SMALL INSCRIBED ROCK, BEFORE CONSERVATION MEASURES.



(b) SHAHBAZGARHI: SMALL INSCRIBED ROCK, AFTER CONSERVATION MEASURES.

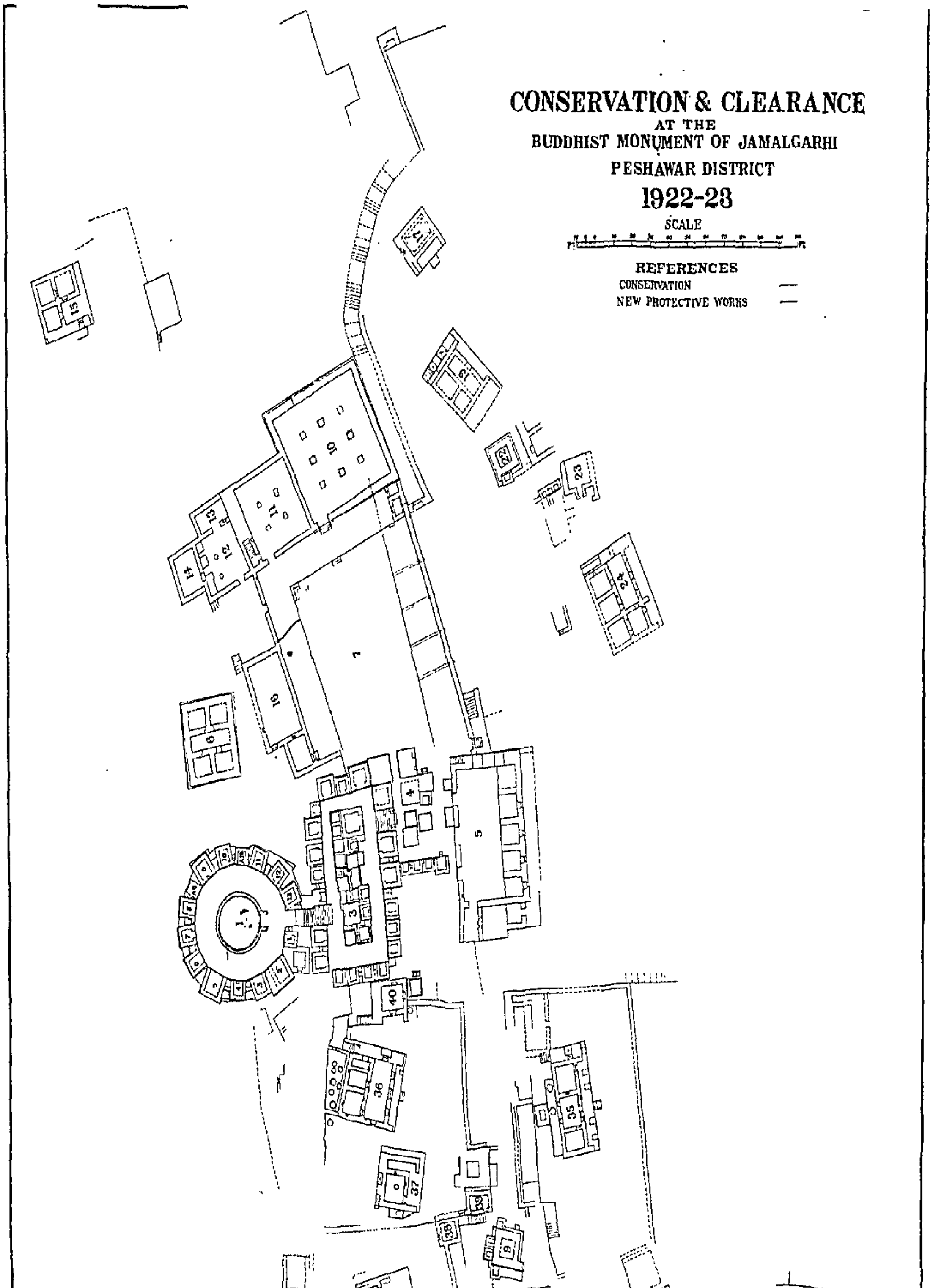


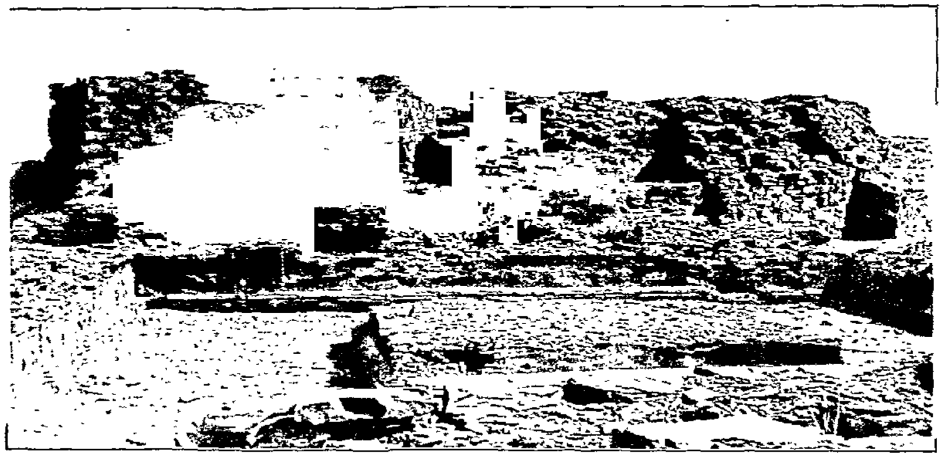
(c) ZARO DHERI, HAZARA DISTRICT. STUPA AND ADJACENT MOUNDS.



(d) JAMALGARHI. BUILDING No 35, AFTER CLEARANCE AND CONSERVATION.

Photoengraved & printed at the Offices of the Survey of India, Calcutta, 1921

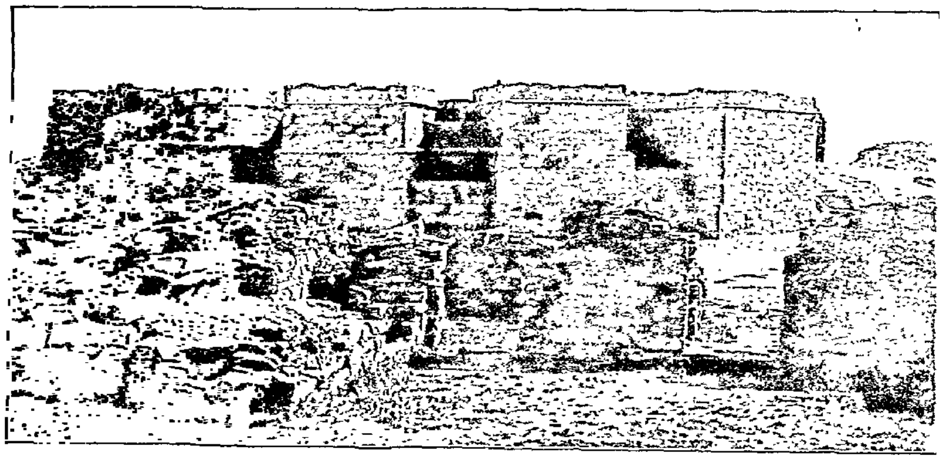

CONSERVATION & CLEARANCE
AT THE
BUDDHIST MONUMENT OF JAMALGARHI
PESHAWAR DISTRICT
1922-23
SCALE
REFERENCES
CONSERVATION
NEW PROTECTIVE WORKS



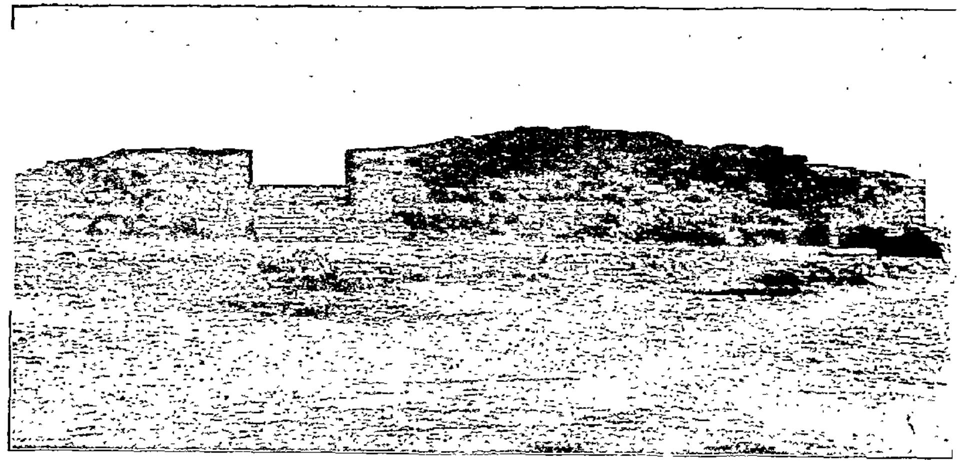
(*a*) JAMALGARHI: BACKS OF CHAPELS ENCIRCLING MAIN STUPA, AFTER CLEARANCE AND BEFORE CONSERVATION.



(*b*) JAMALGARHI: EAST WALL OF COURTYARD 7, BEFORE CLEARANCE.

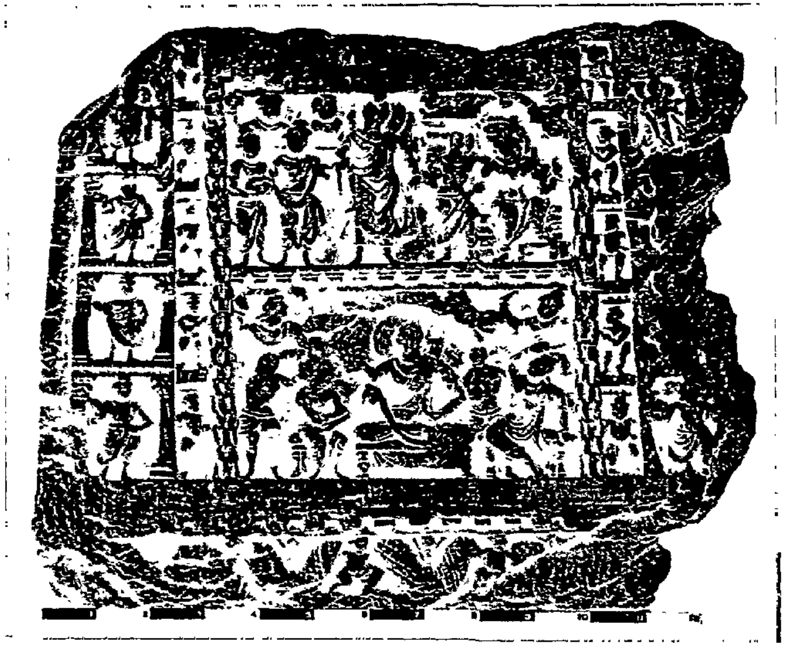


(*c*) JAMALGARHI: BACKS OF CHAPELS ENCIRCLING MAIN STUPA, AFTER CONSERVATION.



(*d*) JAMALGARHI: EAST SIDE OF COURTYARD 7, AFTER CONSERVATION.

Photo-engraved & printed at the Offices of the Survey of India, Calcutta, 1921



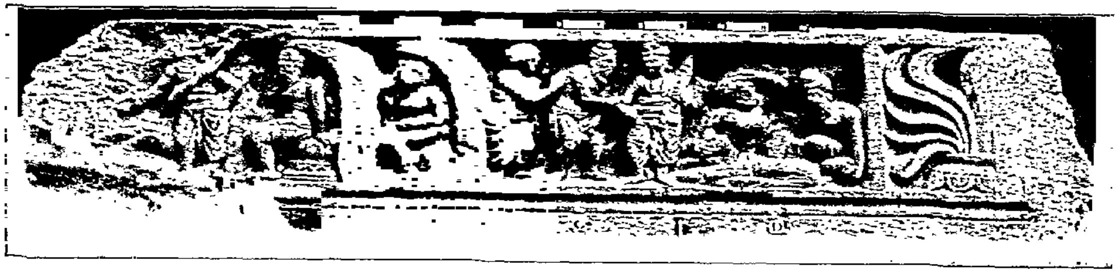
(*a*) Takht-i-Bahi. (1) Nanda drawn away from his wife. (2) Shaving the head of Nanda preparatory to his ordination.



(*b*) Akhun Dheri, Peshawar District, Bronze image of female deity.



(*c*) Kot, Peshawar District. Buddha presenting the conquered snake to Kāśyapa.

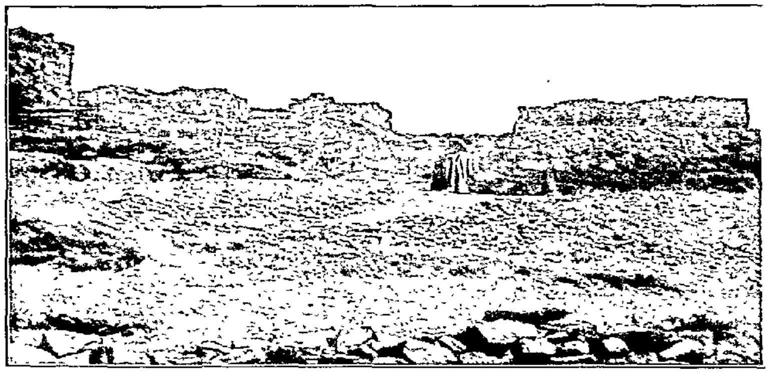


(*d*) Kot, Peshawar District. Four scenes from the Śyāma Jātaka.

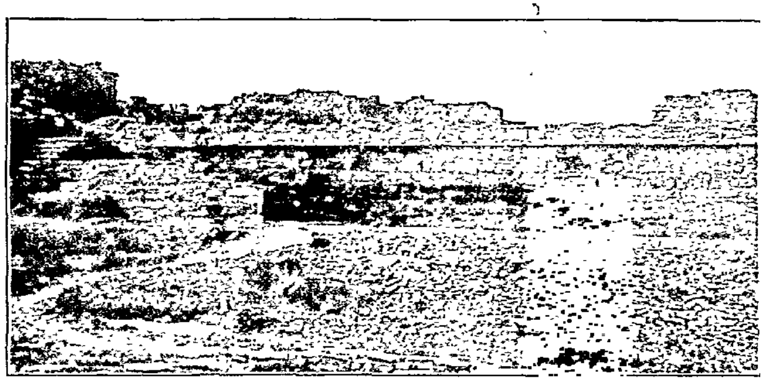
Photo-engraved & printed at the Offices of the Survey of India, Calcutta, 1921

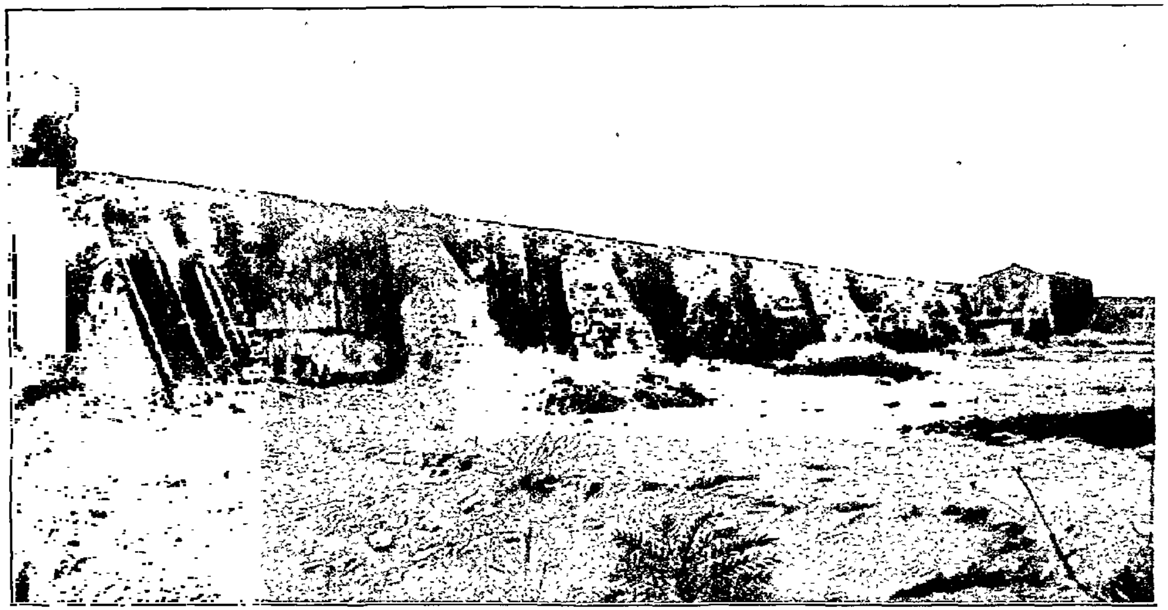


(*a*) JAMALGARHI. SOUTH WALL OF COURTYARD 7, BEFORE EXCAVATION.

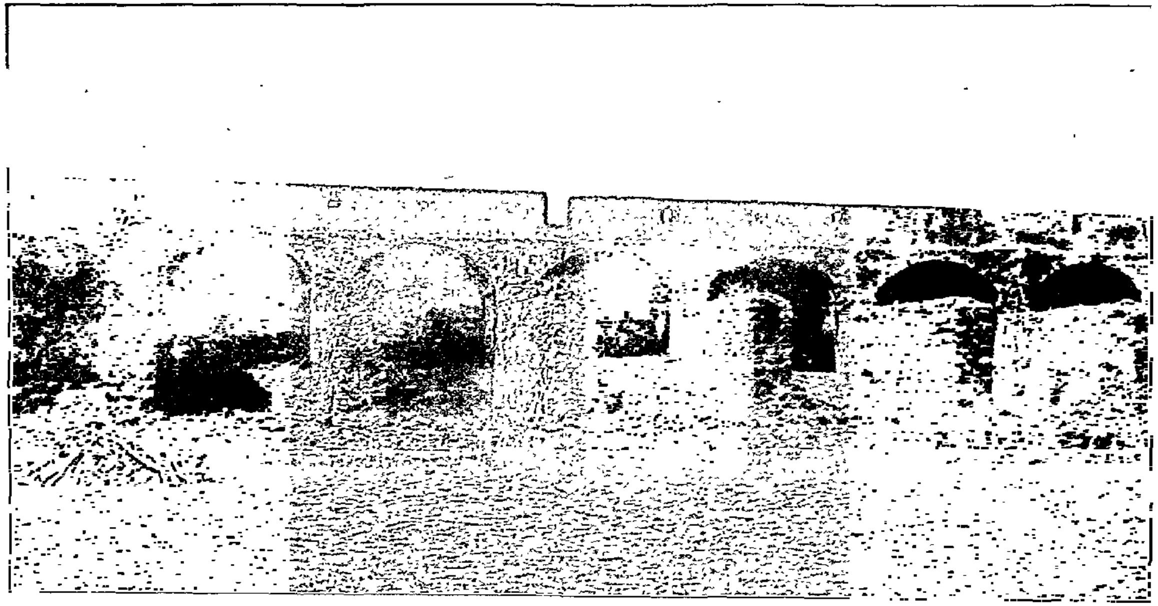


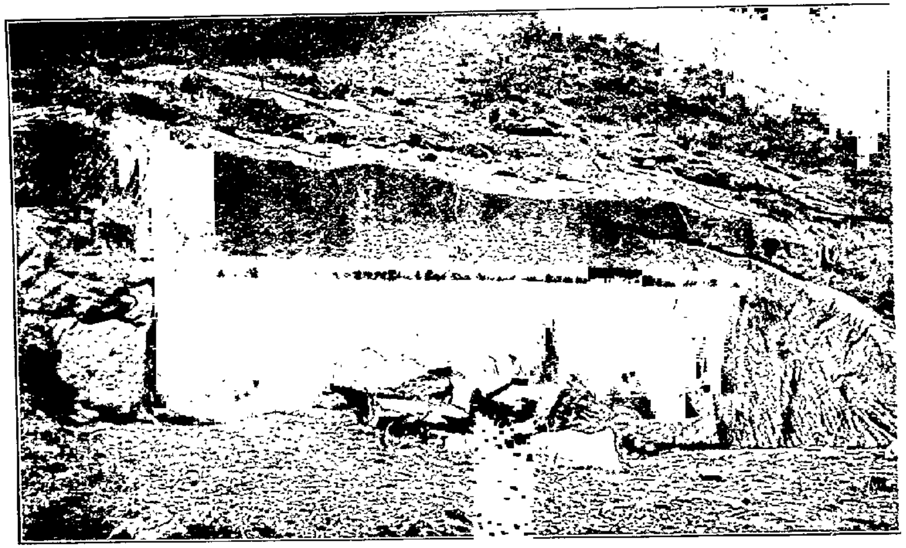
(*b*) JAMALGARHI, SOUTH WALL OF COURTYARD 7, AFTER EXCAVATION.



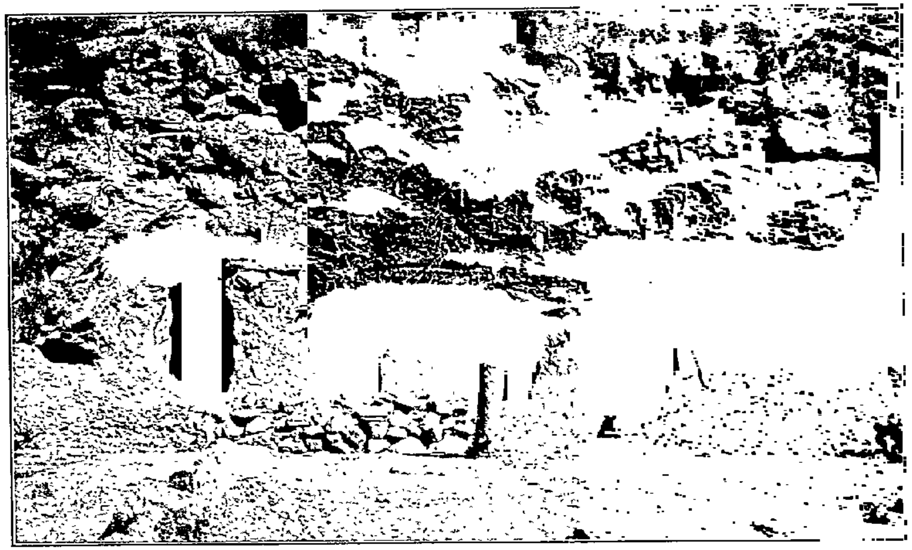


(*d*) BASSEIN FORT, NORTH WALL OF RAMPART SHOWING ORDINARY BUTTRESSES AFTER CLEARANCE OF JUNGLE.

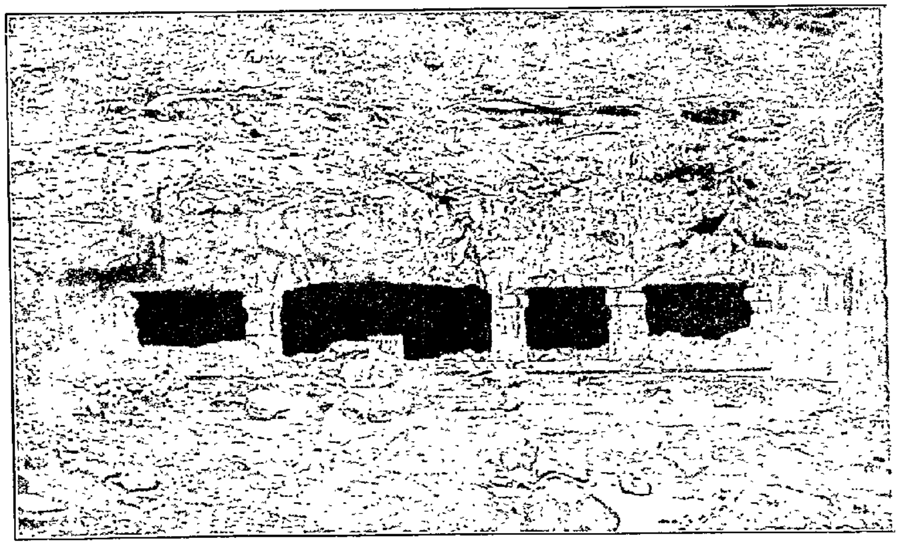




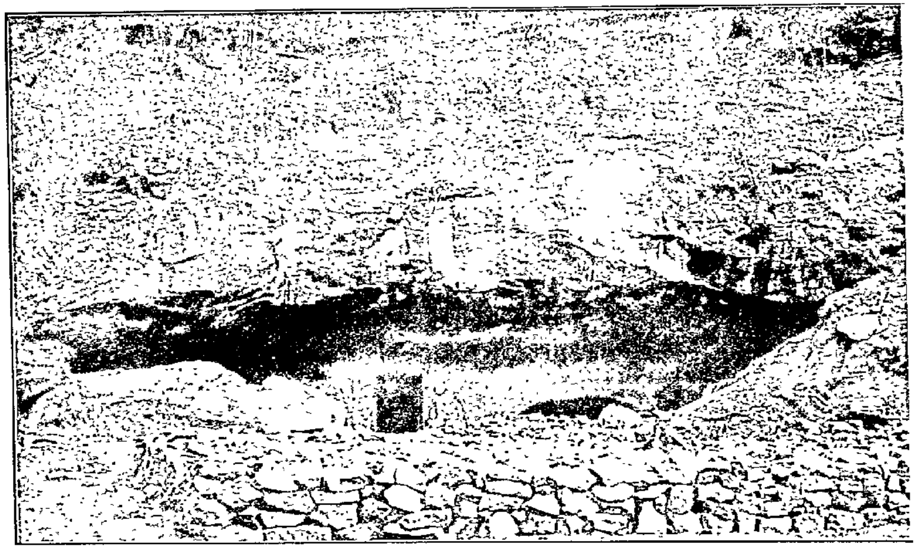
(a) ELEPHANTA: CAVE NO. 6, AFTER EXCAVATION.



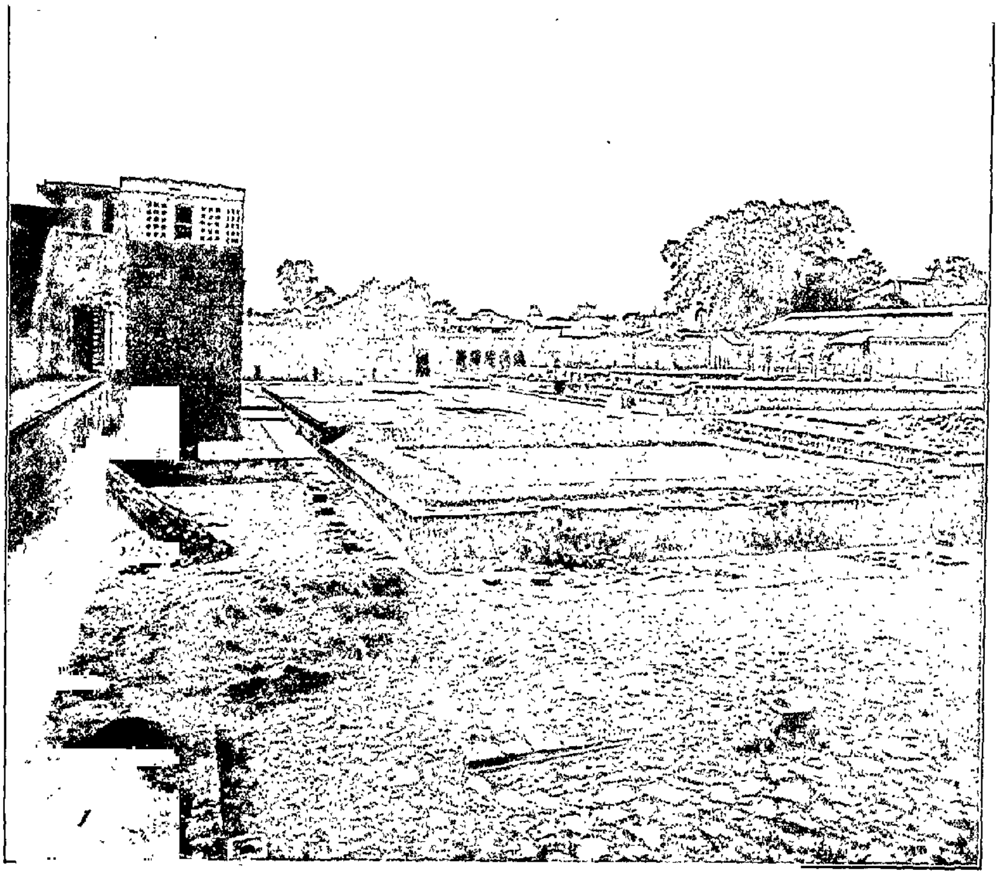
(b) ELEPHANTA: CAVE NO. 2, AFTER EXCAVATION.



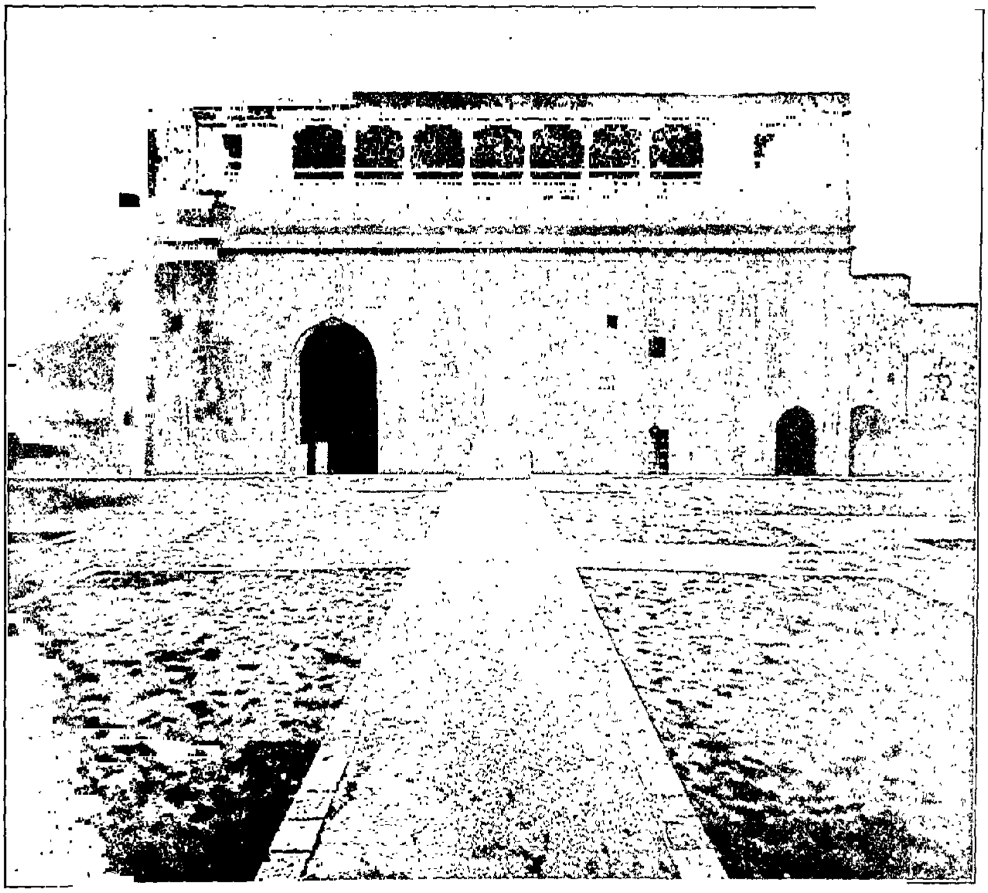
(c) ELEPHANTA: CAVE NO. 5, SHOWING THE PLINTH EXPOSED TO VIEW.



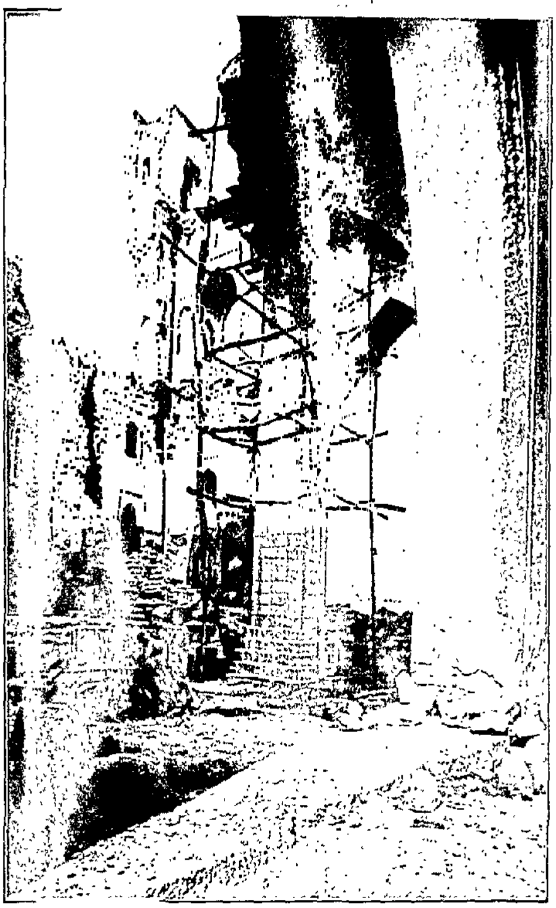
(d) ELEPHANTA: CAVE NO. 4, AFTER EXCAVATION.



(a) Shanwar Wada, Poona, general view showing lawns in front of the palace.



(b) Shanwar Wada, Poona, another view.



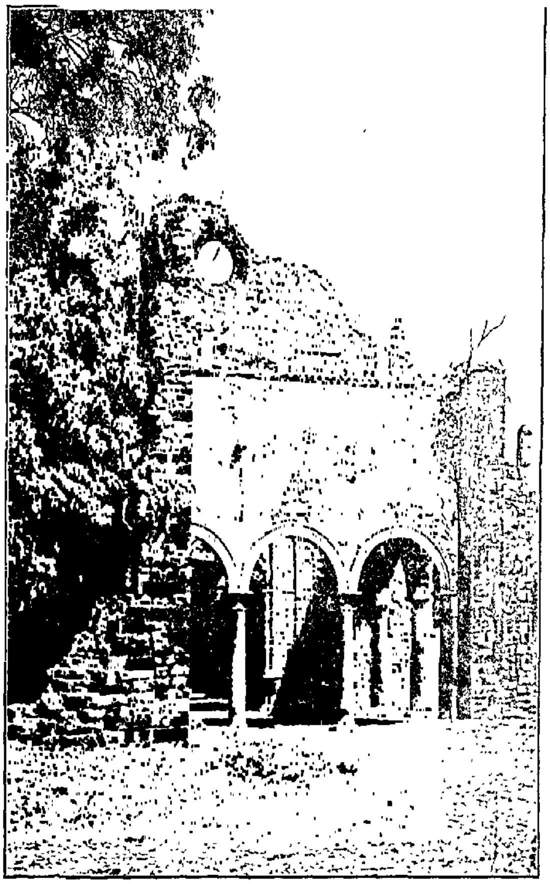
(a) SANGIT MAHAL AT TORVI, BIJAPUR DISTRICT, SHOWING NEW SUPPORT PILLAR UNDER CONSTRUCTION.



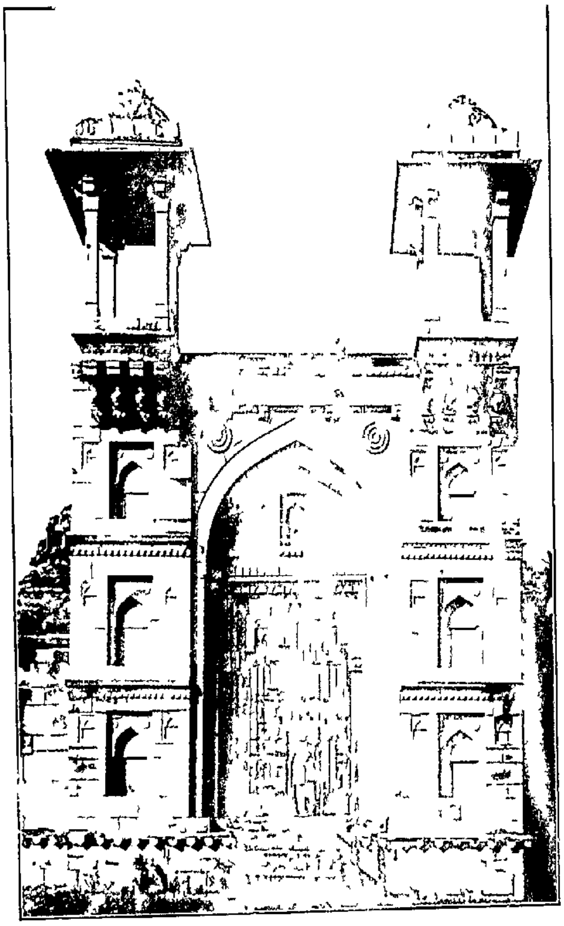
(b) ELEPHANTA; DOORWAY OF CAVE NO. 5.



(c) ST. PAUL'S CHURCH AND MONASTERY AT BASSEIN FORT, VIEW FROM S. W. AFTER CLEARANCE OF JUNGLE.



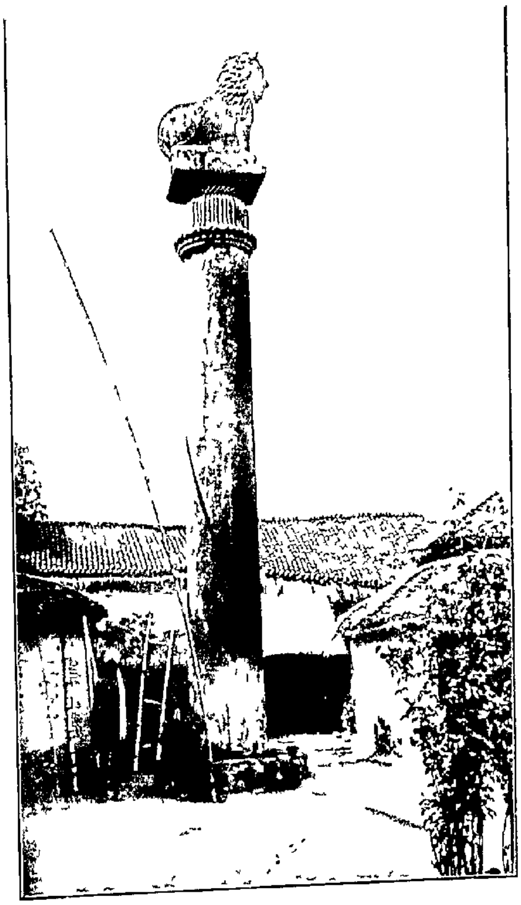
(d) ST. PAUL'S CHURCH AND MONASTERY AT BASSEIN FORT, VIEW FROM S. E. AFTER CLEARANCE OF JUNGLE.



(a) SASARAM, SHAHABAD DISTRICT ALIWAL KHAN'S TOMB, EAST GATE



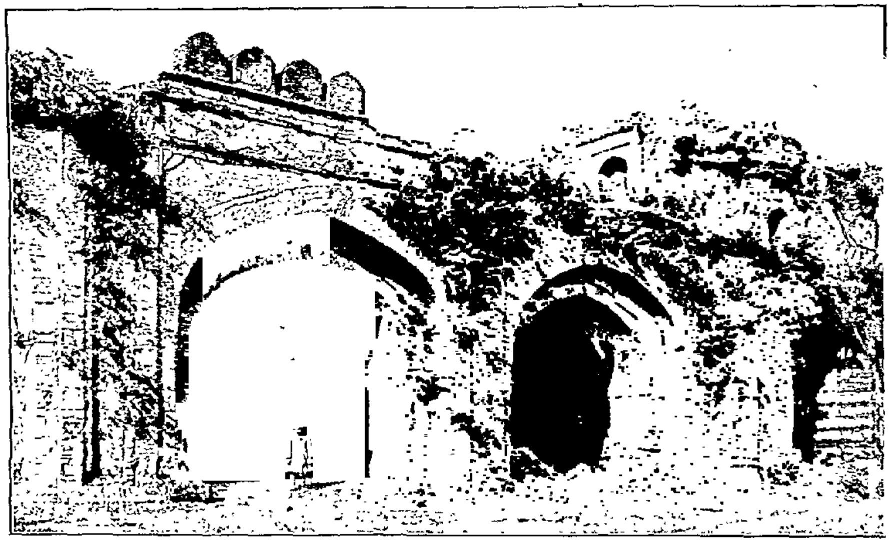
(b) PALAMAU NEW FORT, NAGPURI DARWAZA.



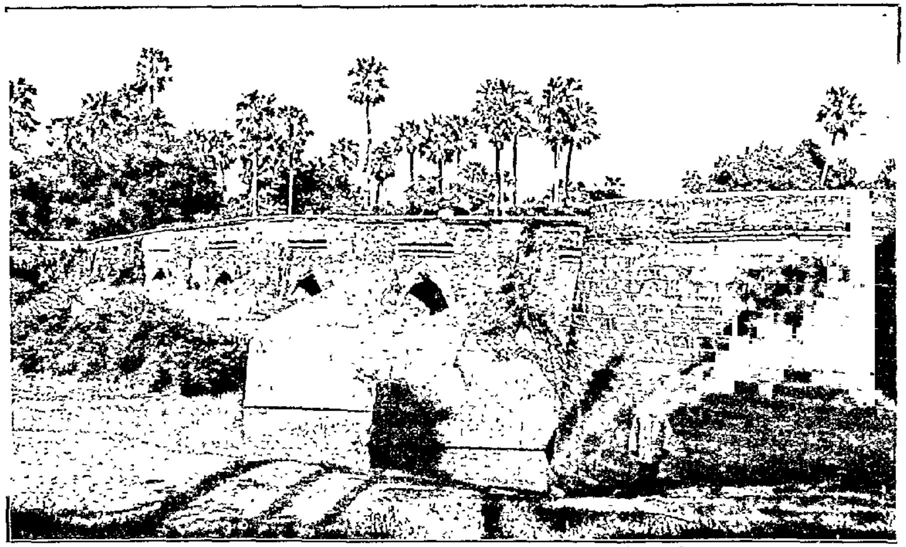
(c) KOLHUA, MUZAFFARPUR DISTRICT ASOKA COLUMN



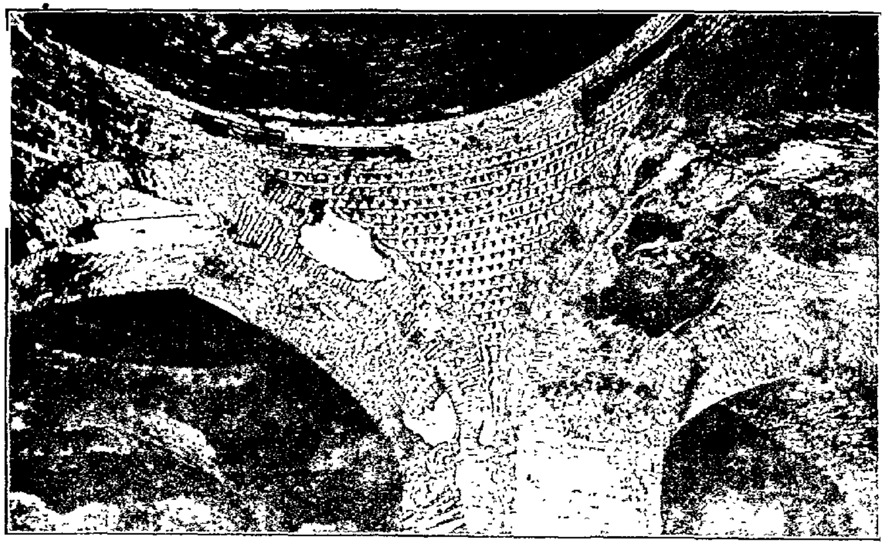
(d) NALANDA: MONASTERY NO I, COPPER PLATE SEAL OF DEVAPADEVA.



(a) HADAF, RAJMAHAL, SANTAL PARGANAS, JAMA MASJID, EAST FACADE.



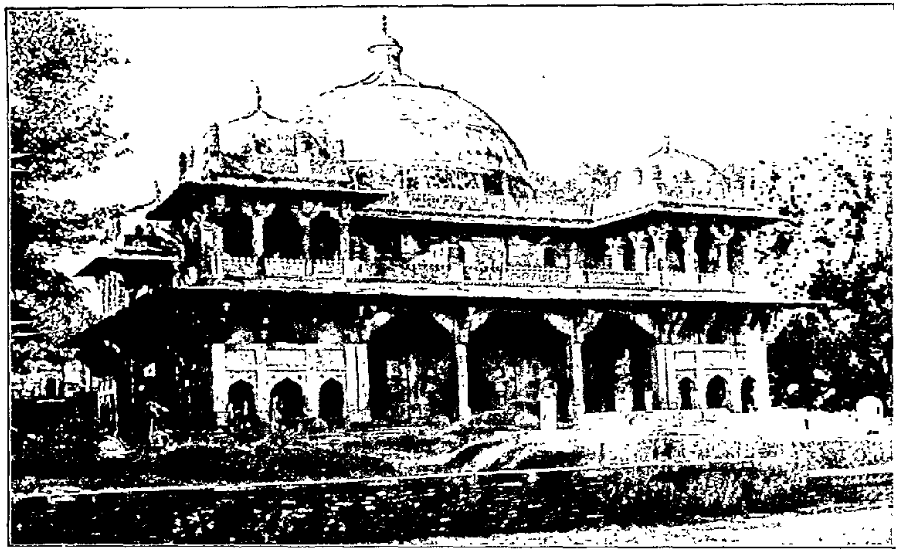
(b) HADAF, RAJMAHAL, SANTAL PARGANAS, MUGHAL BRIDGE.



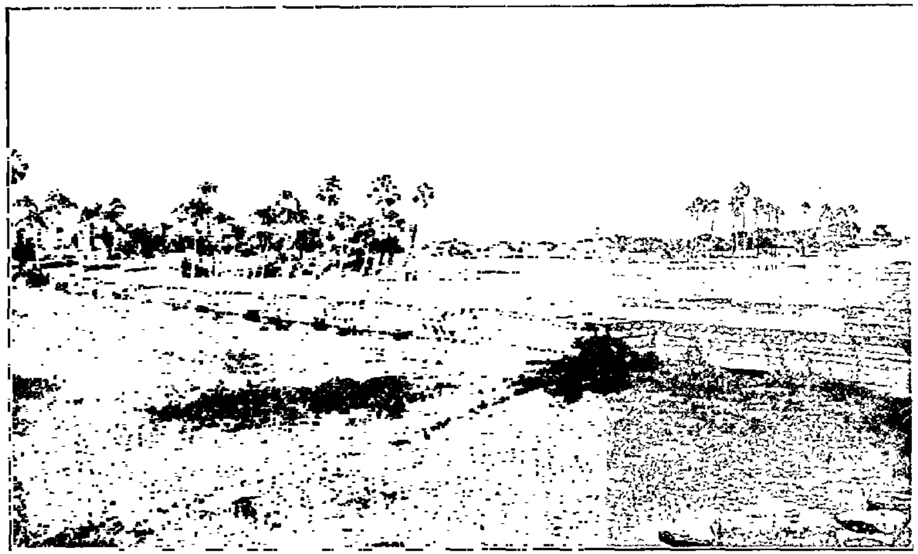
(c) HADAF, RAJMAHAL, SANTAL PARGANAS, INTERIOR PENDENTIVE.



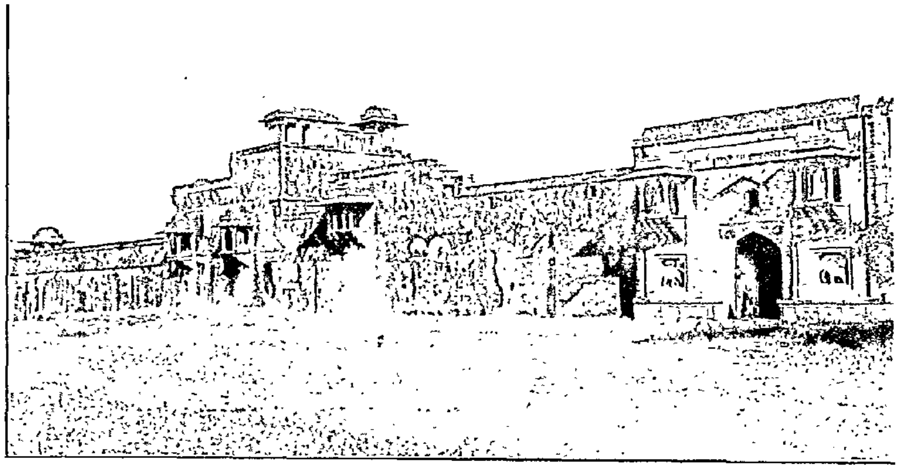
(d) PALAMAU, NEW FORT N.W. CORNER, TOP OF BASTION.



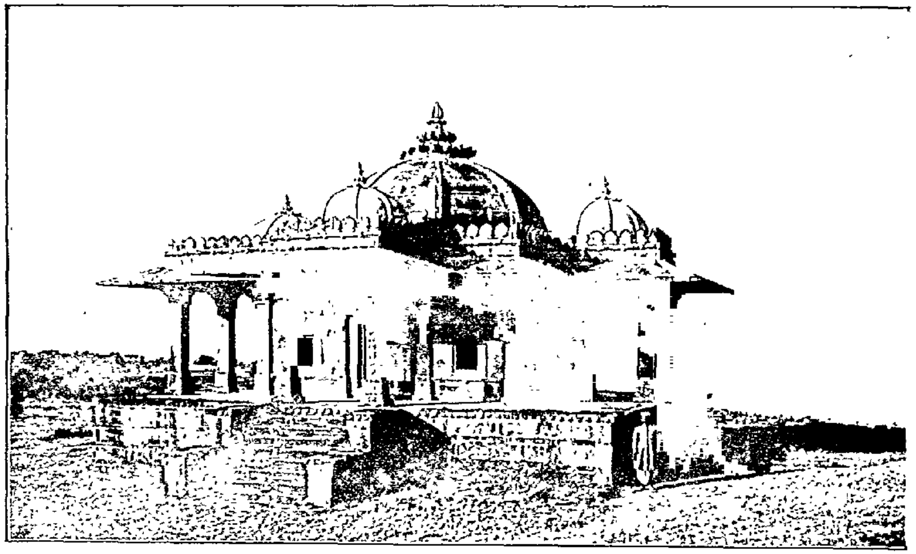
(a) MANER, PATNA DISTRICT. CHHOTI DARGAH (TOMB OF MAKHDUM SHAH DAULAT).



(b) SASARAM, SHAHABAD DISTRICT. SALIM SHAH'S TOMB, CAUSEWAY FROM S.W.



(c) ROHTASGARH, SHAHABAD DISTRICT, PALACE FROM SERAI.

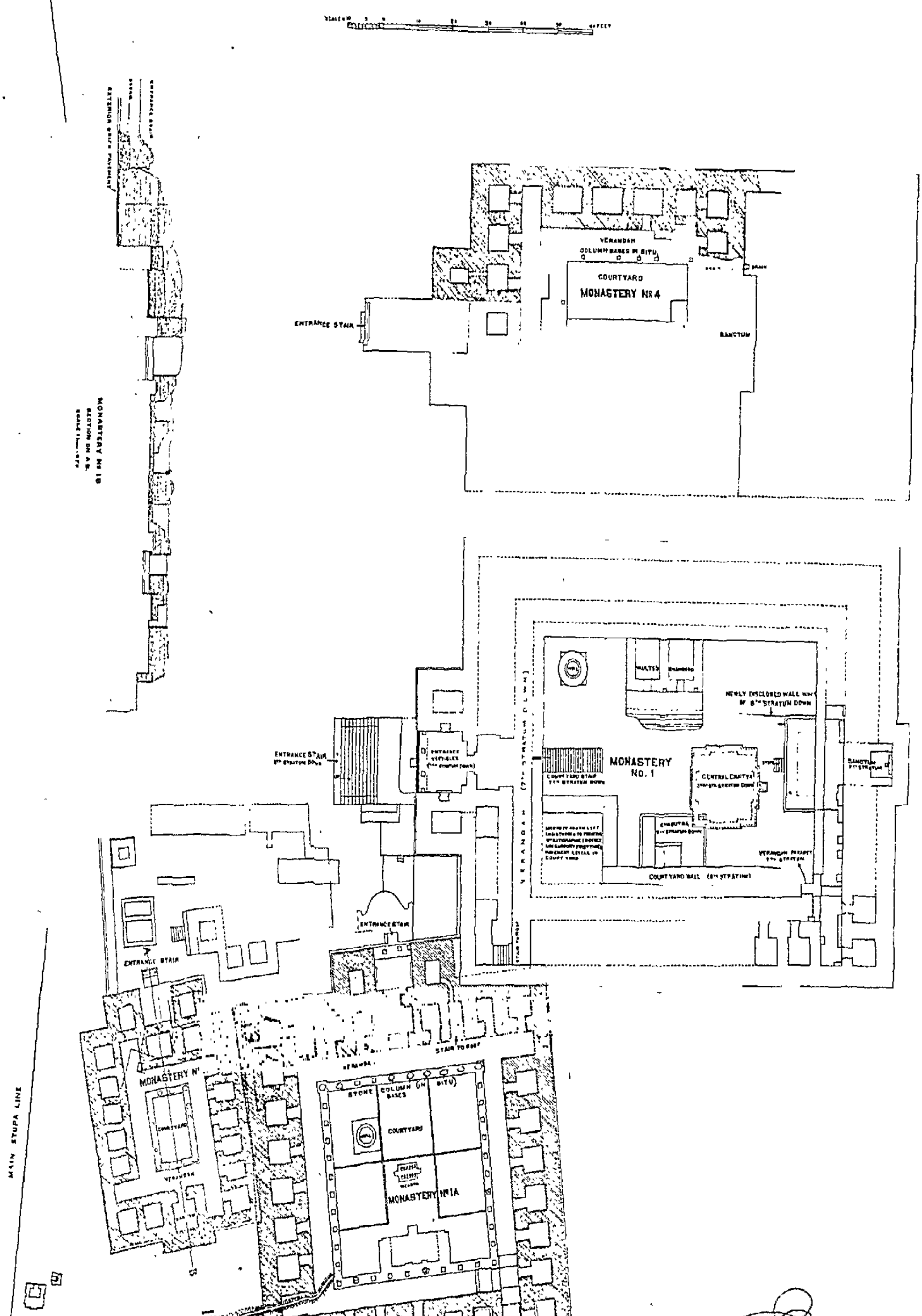


(d) ROHTASGARH, SHAHABAD DISTRICT. HARIS CHANDRA'S TEMPLE.

EXCAVATIONS AT NALANDA

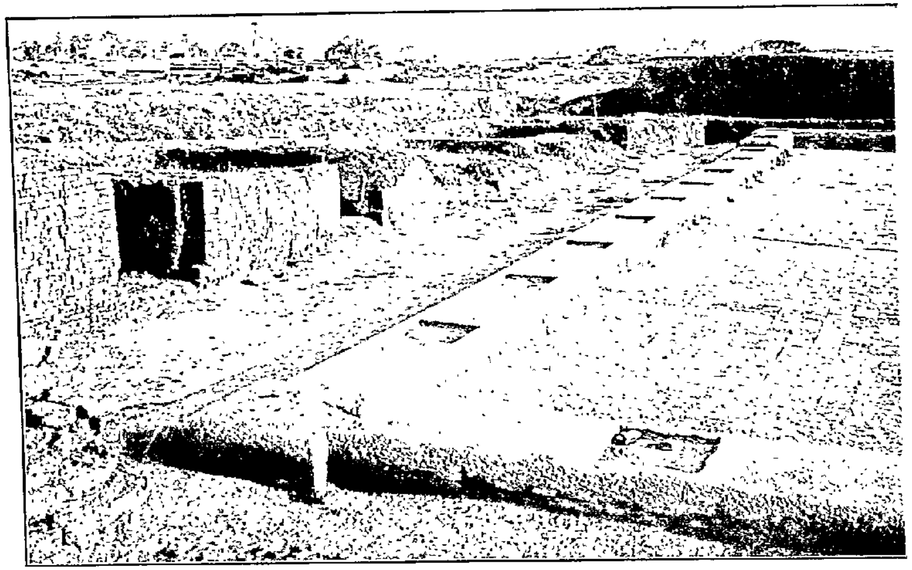
PLATE XVIII.

1922-23

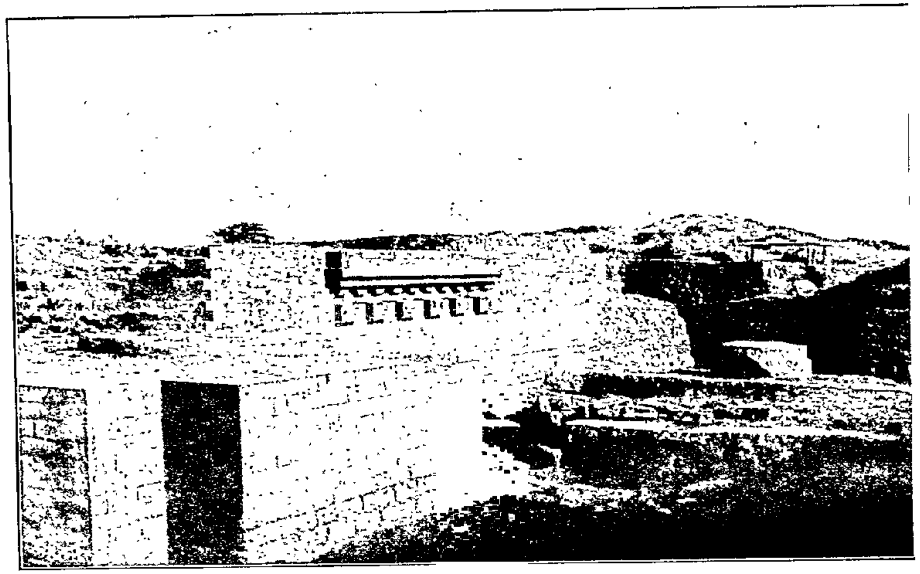


Reg. No. 3161 E.. 23.

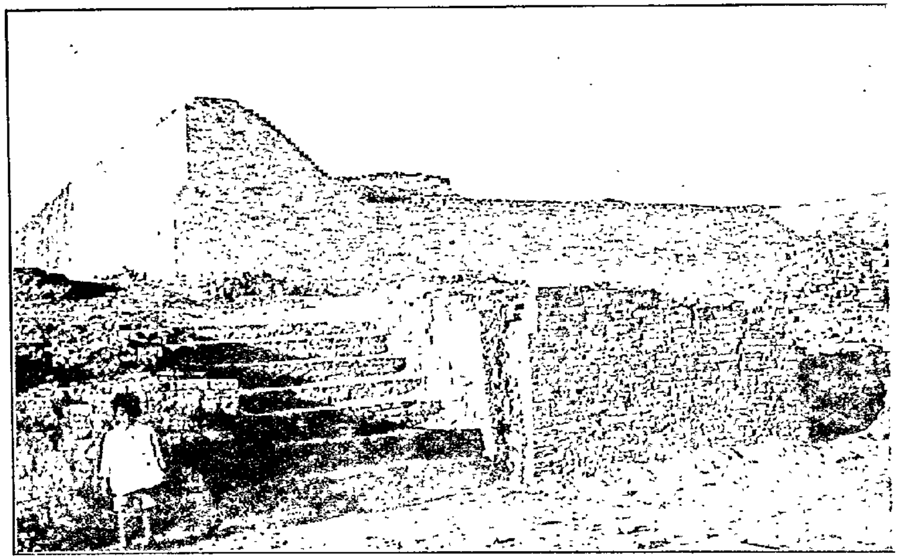
HELIO S. I. O. CALCUTTA



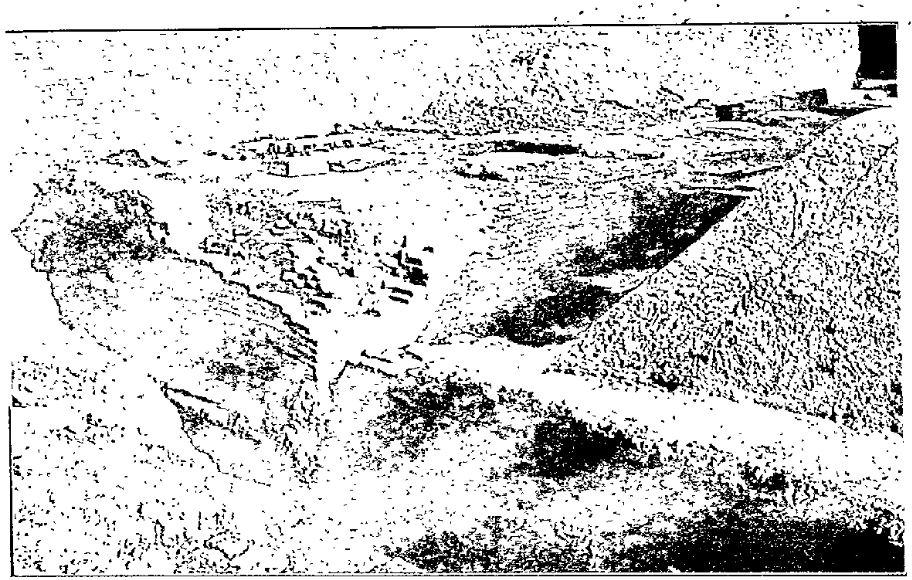
(*a*) NALANDA. MONASTERY No. IA. PARAPET OF VERANDAH IN QUADRANGLE, AFTER REPAIR.



(*b*) NALANDA. MONASTERY No. IA. MAIN NORTH ENTRANCE; WEST WALL OF VESTIBULE UNDER REPAIR.

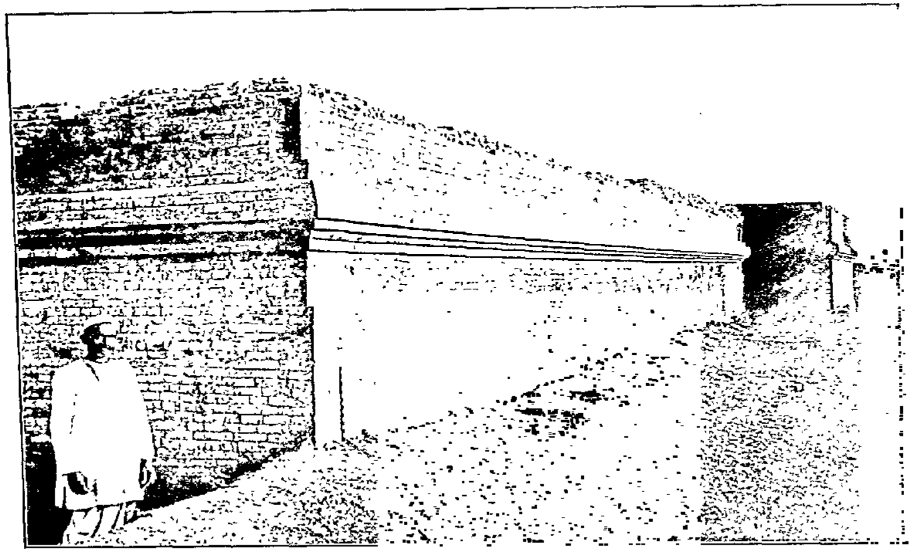


(*c*) NALANDA. MONASTERY No. I. S.W. CORNER OF EXTERIOR WALL, AFTER REPAIR.

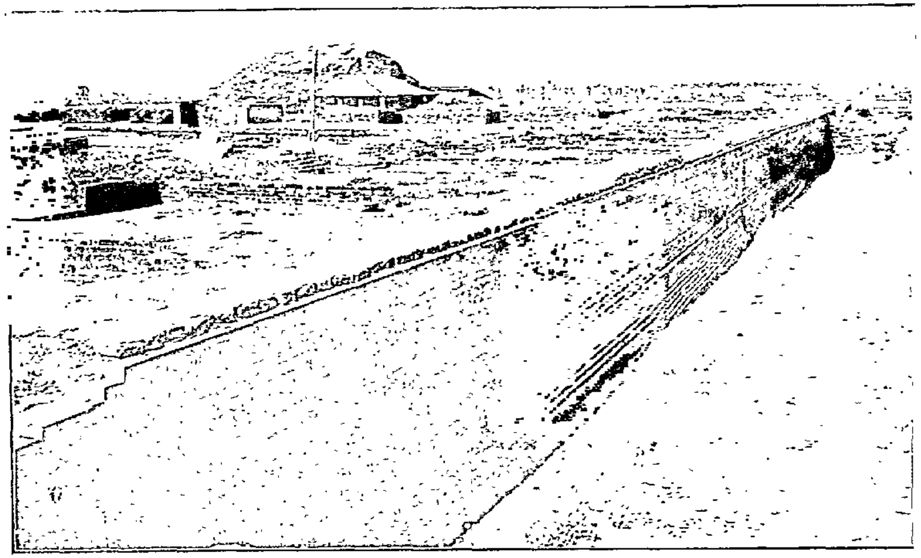


(*d*) NALANDA. MONASTERY No I; CHABUTRA ON EAST SIDE OF COURTYARD SHOWING

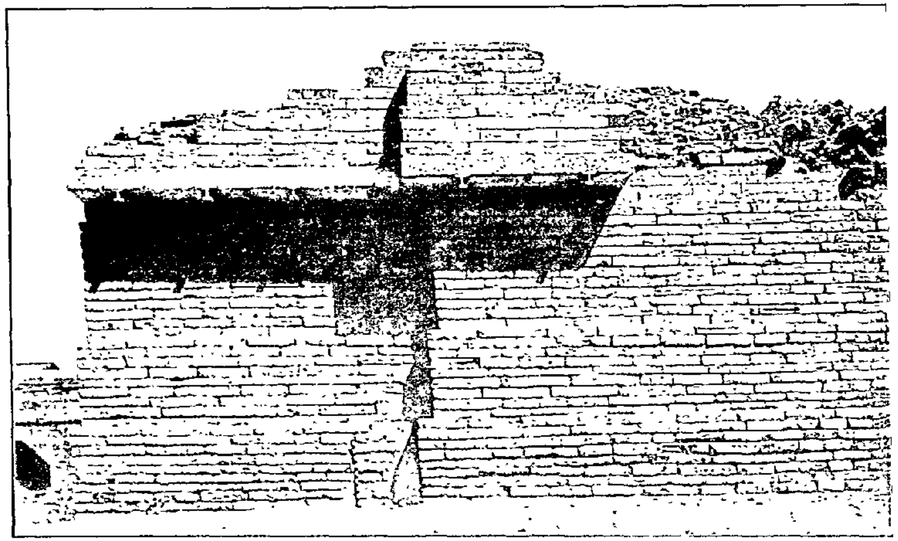
PLATE XX.



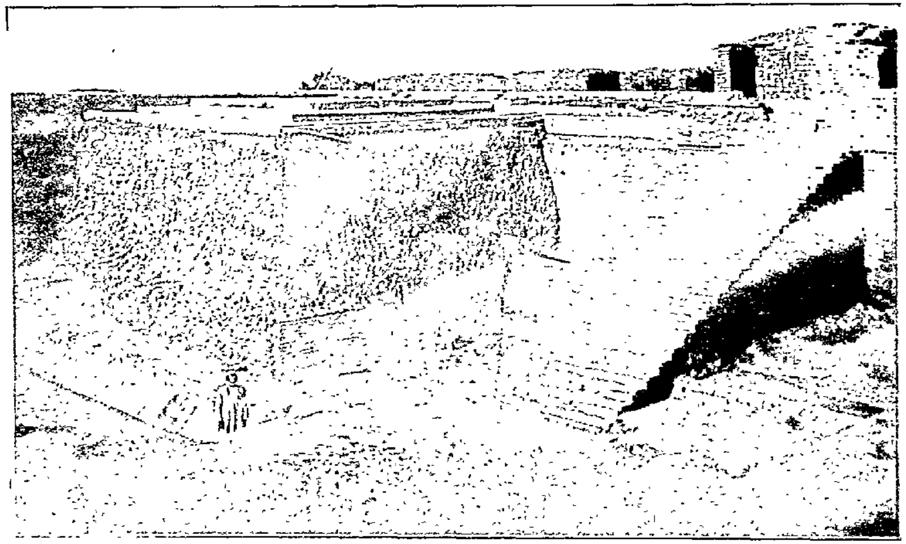
(a) NALANDA. MONASTERY NO. I. S.E. CORNER OF EXTERNAL WALL, AFTER REPAIR.



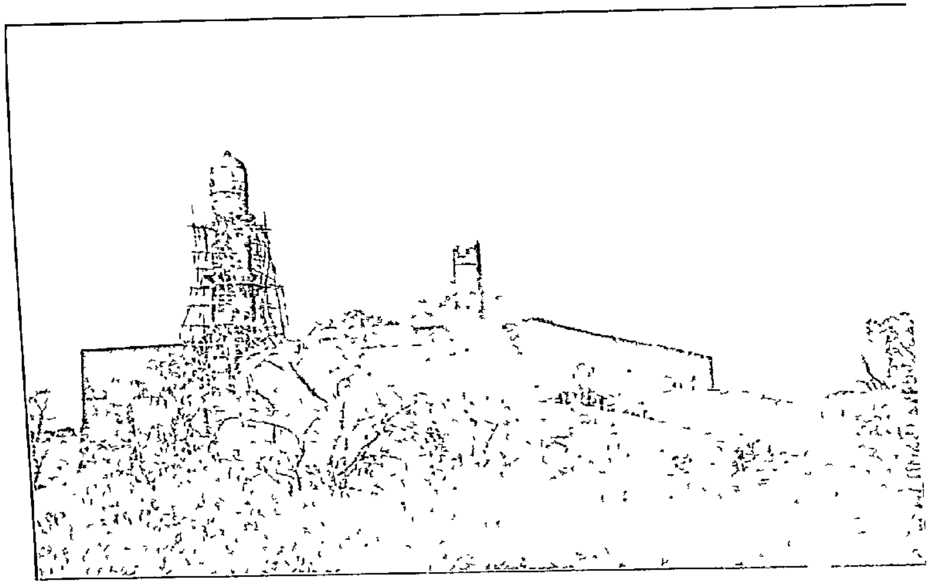
(b) NALANDA. MONASTERY NO. I, NORTH WALL AFTER REPAIR.



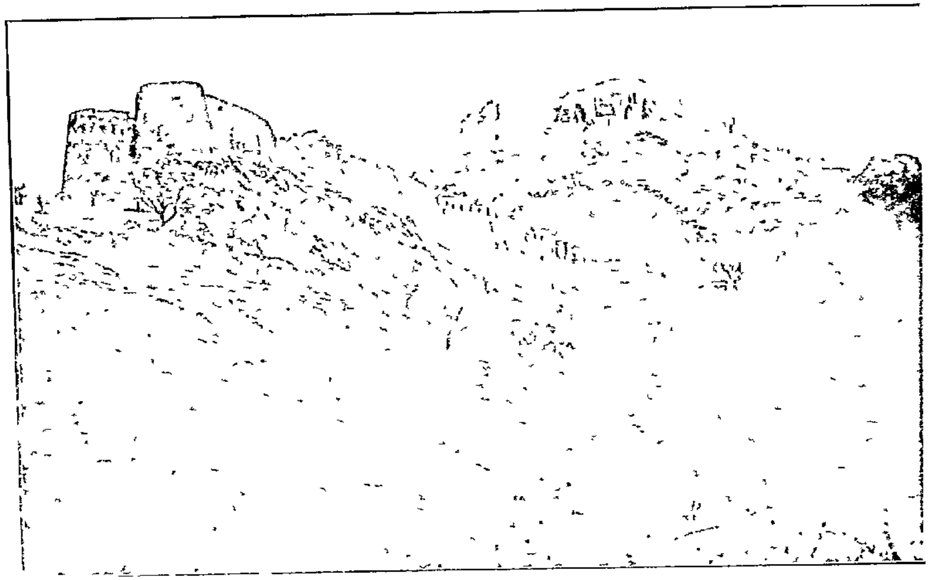
(c) NALANDA. MONASTERY NO. I. CENTRAL CHAITYA IN COURT AS REPAIRED TO SUPPORT LATEST INTEGUMENT AT TOP.



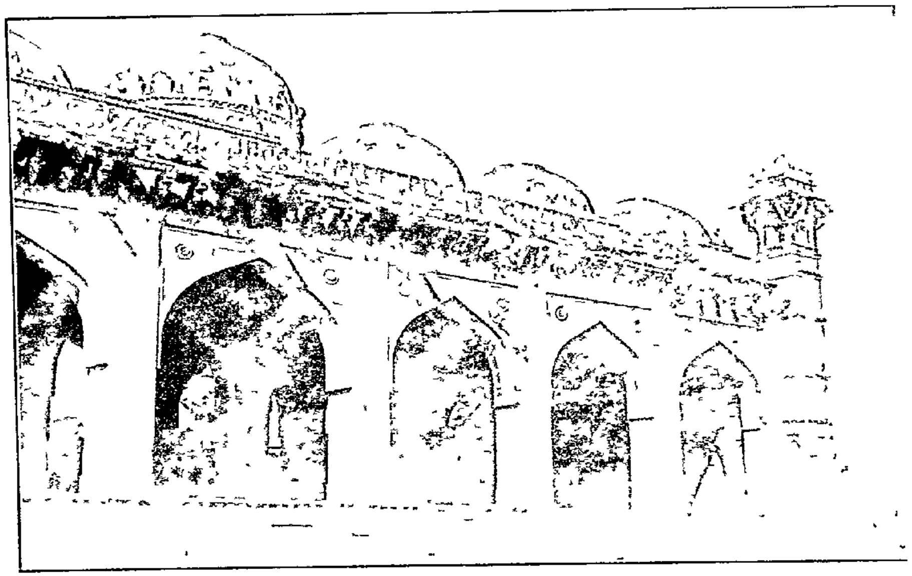
(d) NALANDA. MONASTERY NO. I. INTERNAL STAIR AS RECONSTRUCTED AND EARTH MOUND IN S.W. CORNER OF COURT SUPPORTING LATER PAVED LEVELS.



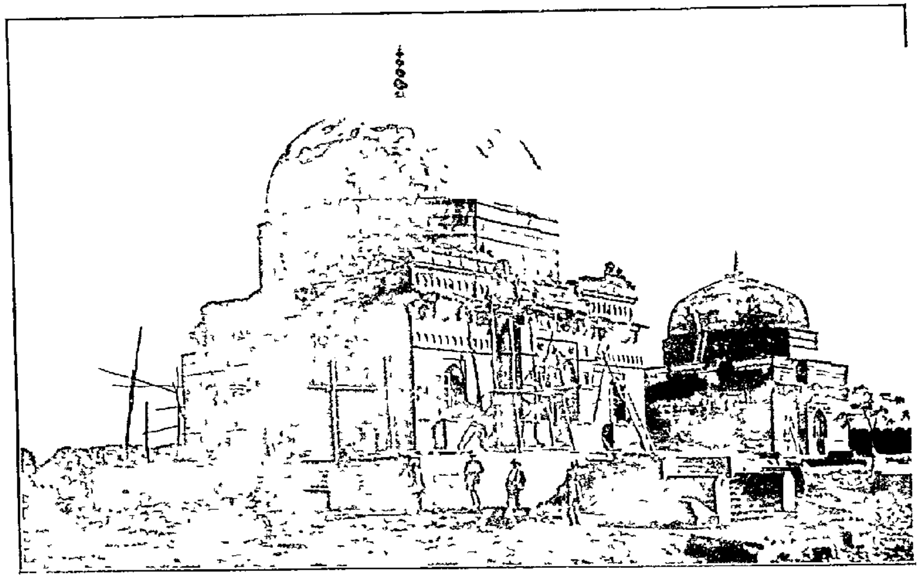
(a) ASIRGARH, NIMAR DISTRICT, JAMA MASJID, FROM S.E.



(b) ASIRGARH NIMAR DISTRICT, GENERAL VIEW FROM WEST



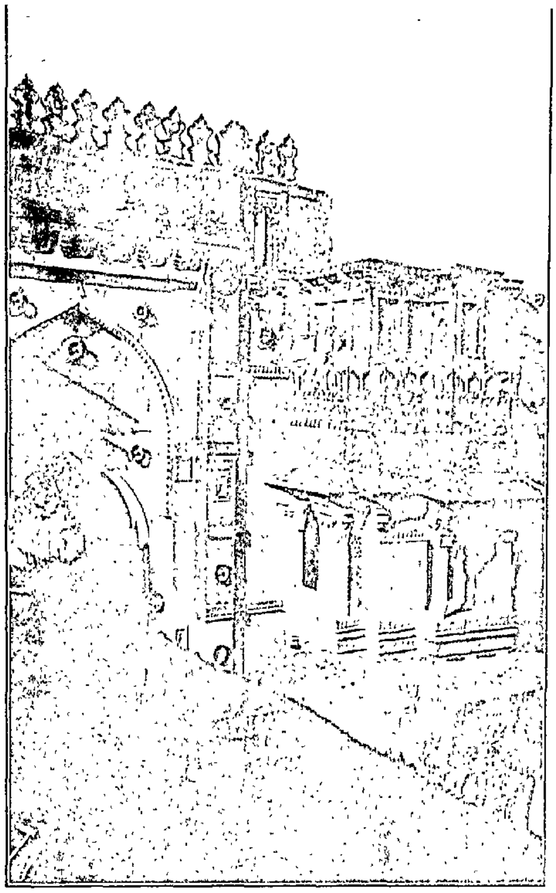
(c) GAWILGARH, AMRAOTI DISTRICT. JAMI MASJID



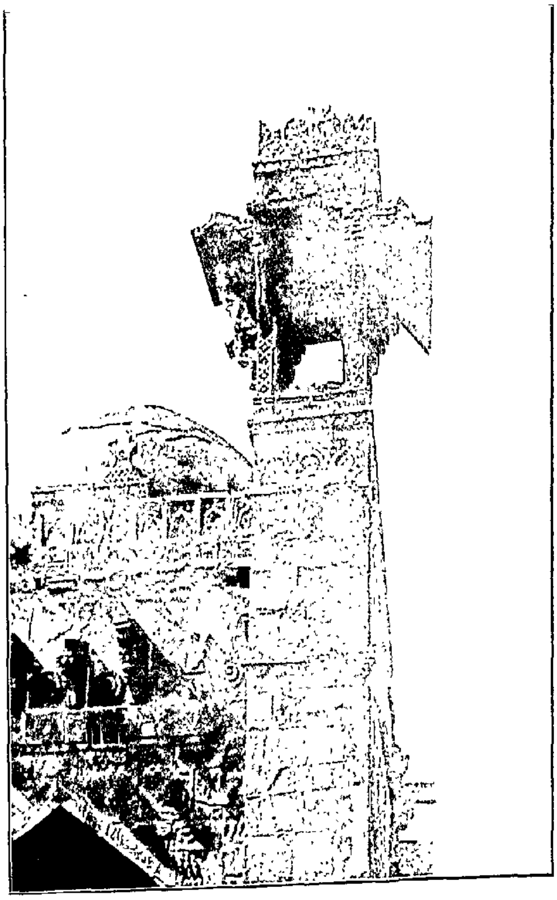
(d) BURHANPUR NIMAR DISTRICT TOMBS OF NADIR AND ADIL SHAH, FROM S.E.



(a) KHIMLASSA, SAUGOR DISTRICT. NAGINA MAHAL.



(b) NARNALLA, AKOLA DISTRICT. FORT, MAHAKALI GATE.

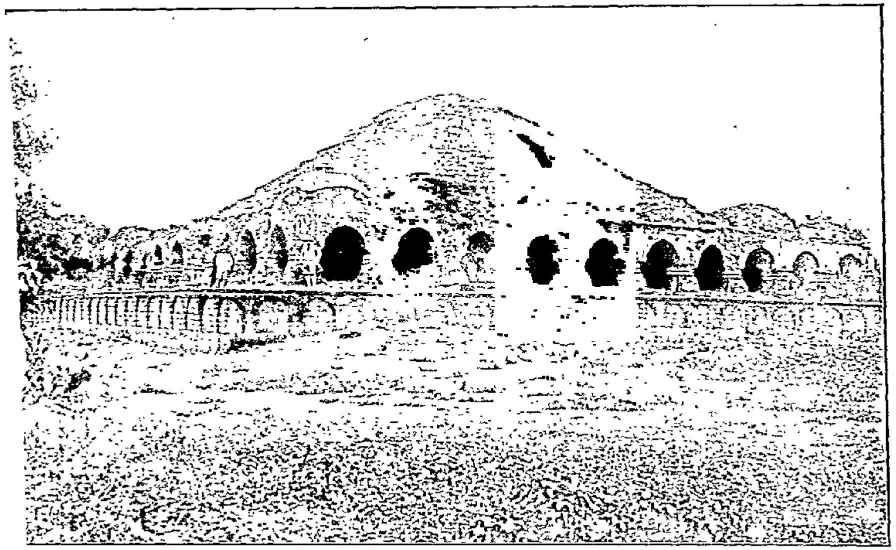


(c) GAWILGARH, AMRAOTI DISTRICT. CHATTRI ON END PYLON.

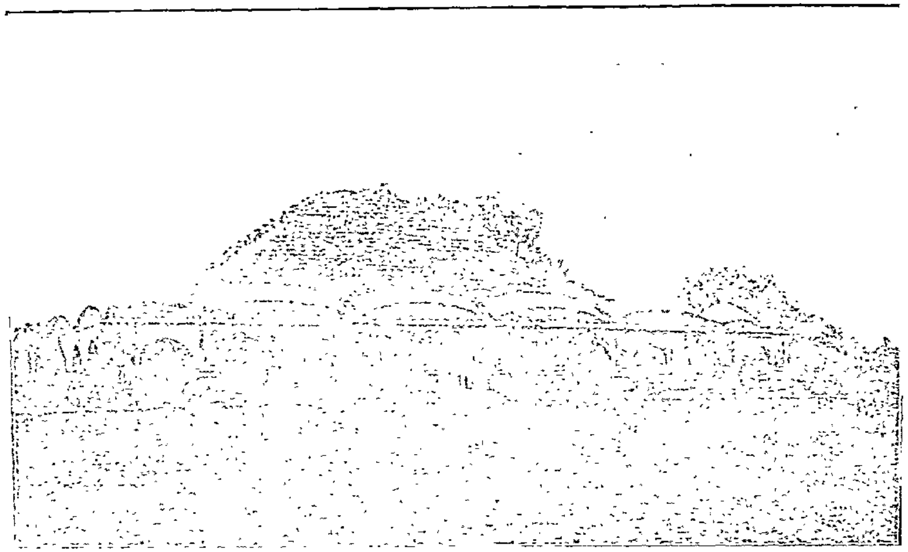


(d) RATANPUR, BILASPUR DISTRICT. KANTHI DEUL TEMPLE.

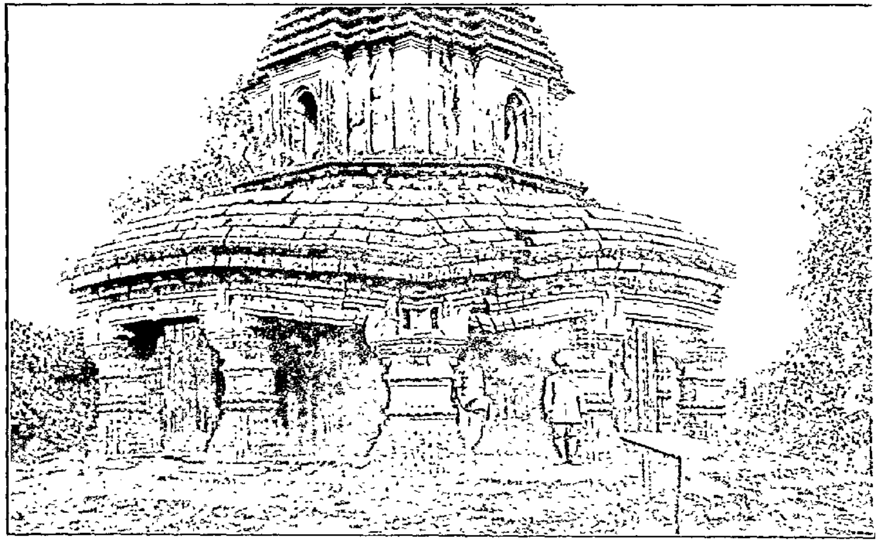
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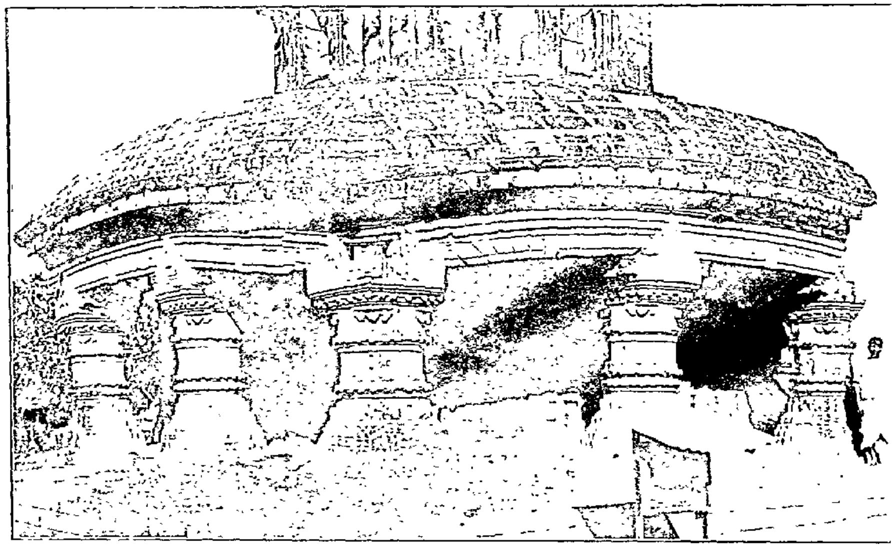
(*a*) VISHNUPUR, BANKURA DISTRICT. RASMANCHA FROM S.E., BEFORE CONSERVATION.



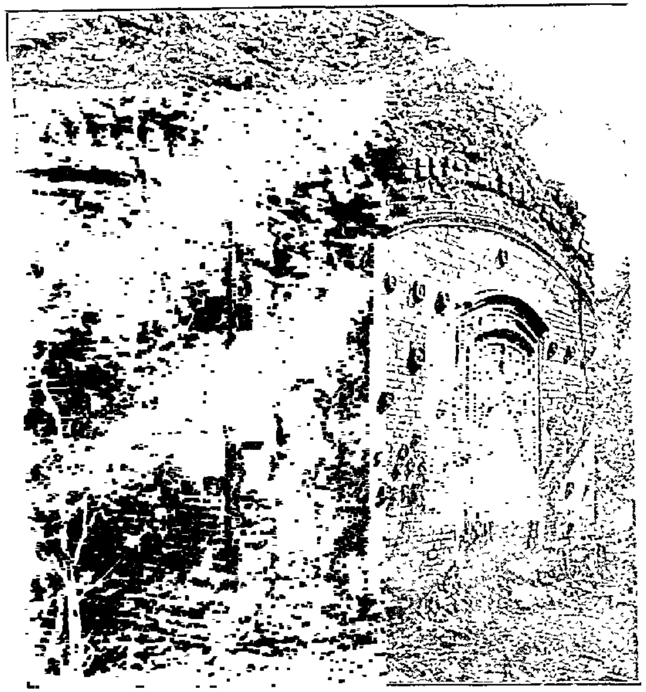
(*b*) VISHNUPUR, BANKURA DISTRICT. RASMANCHA FROM E., AFTER CONSERVATION.



(*c*) VISHNUPUR, BANKURA DISTRICT, MURALI MOHAN TEMPLE FROM S.E., BEFORE CONSERVATION.



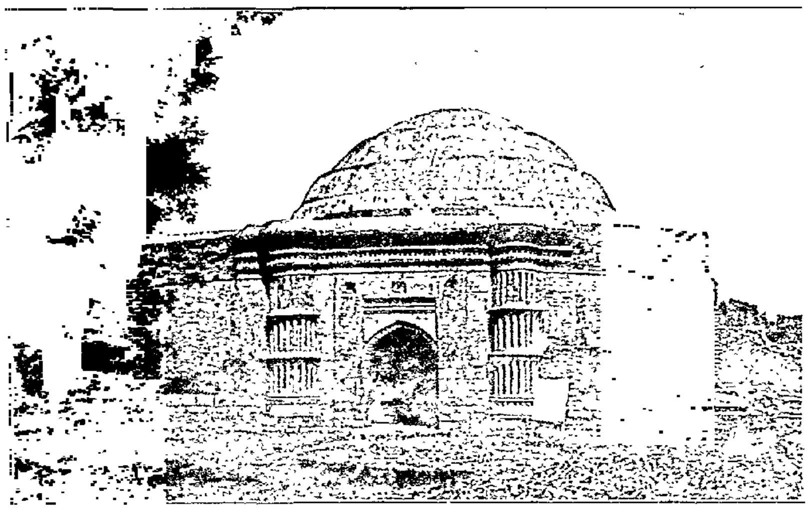
(*d*) VISHNUPUR, BANKURA DISTRICT, MURALI MOHAN TEMPLE FROM S.E., AFTER CONSERVATION.

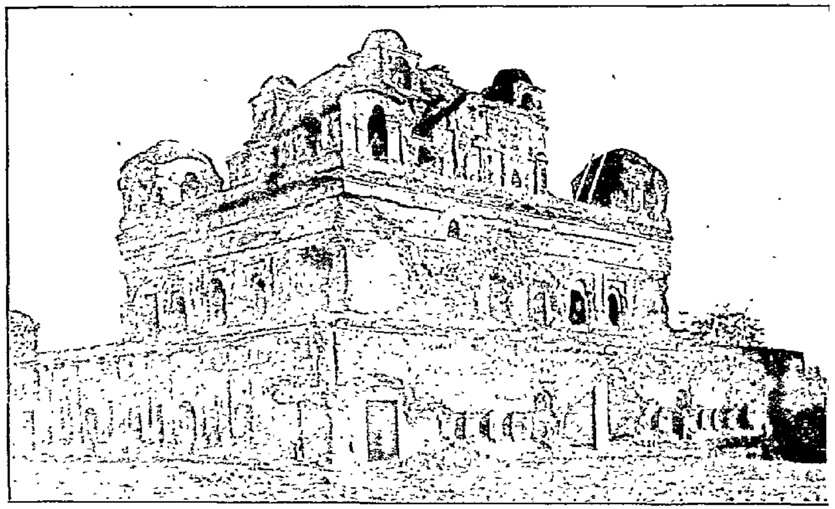


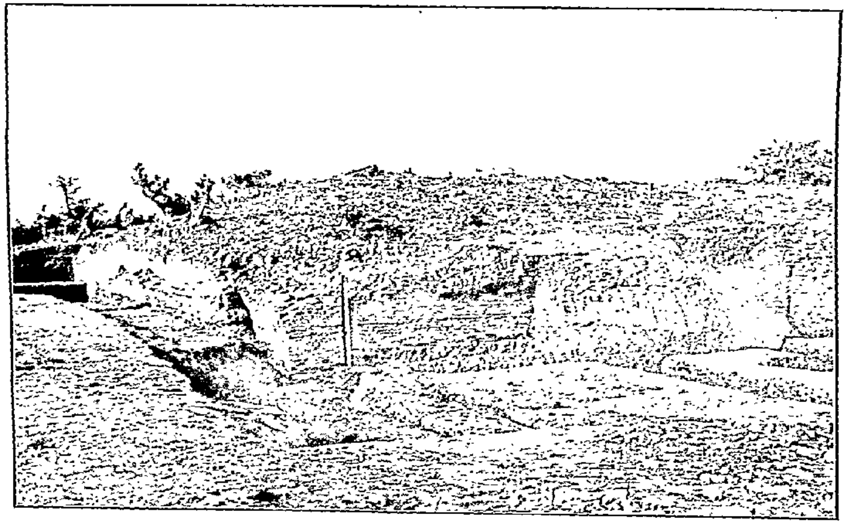
(*a*) VISHNUPUR, BANKURA DISTRICT. RADHABINODE TEMPLE FROM EAST, BEFORE CONSERVATION.



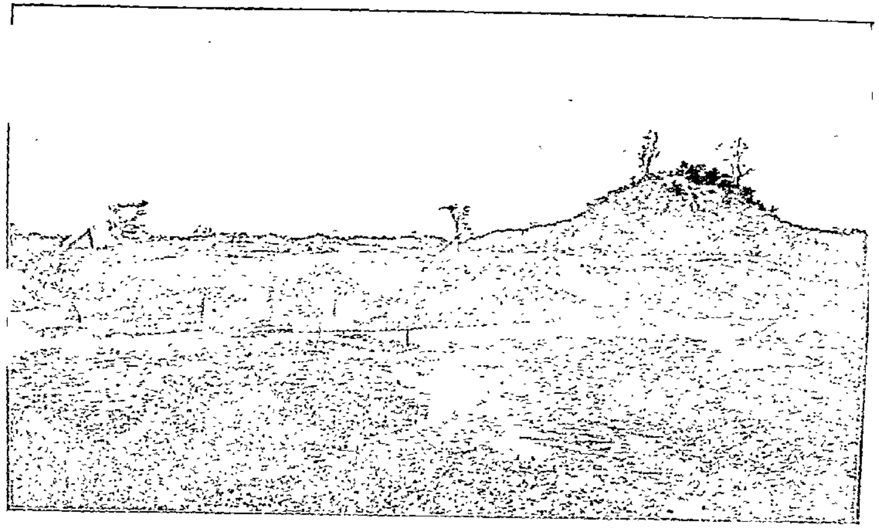
(*b*) VISHNUPUR, BANKURA DISTRICT, RADHABINODE TEMPLE FROM EAST, AFTER CONSERVATION.



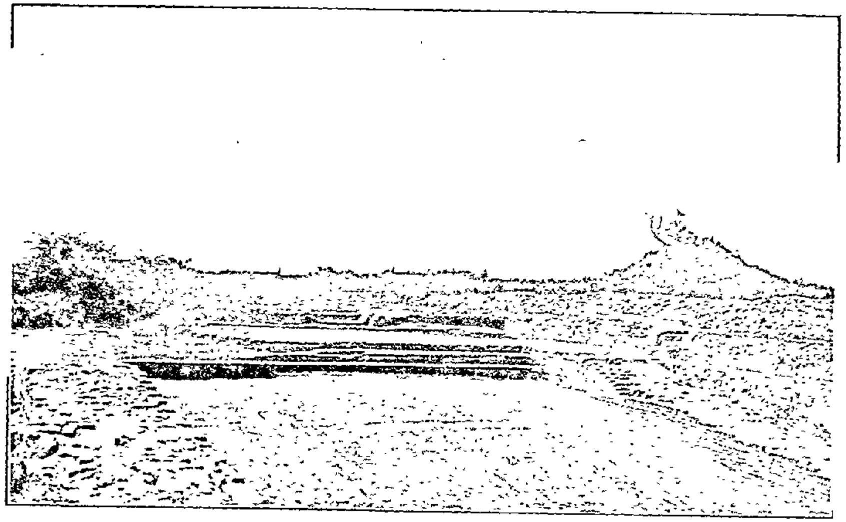




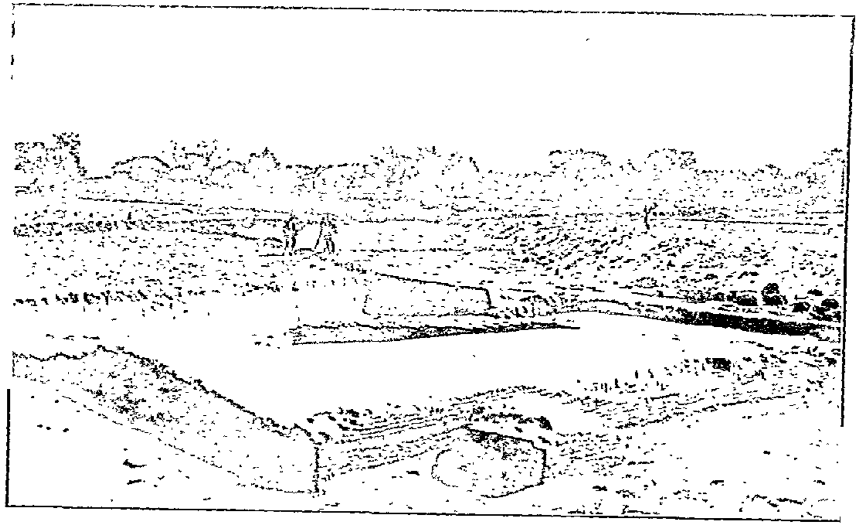
(*a*) PAHARPUR, RAJSHAHI DISTRICT. GENERAL VIEW OF THE RAMPARTS FROM S.W.



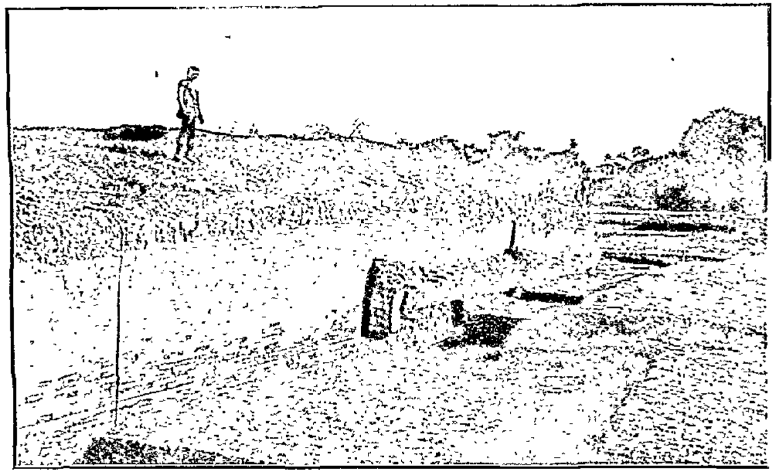
(*b*) PAHARPUR, RAJSHAHI DISTRICT. GENERAL VIEW OF SOUTH RAMPART.



(*c*) PAHARPUR, RAJSHAHI DISTRICT. GENERAL VIEW OF EXCAVATED GHAT FROM S.E.



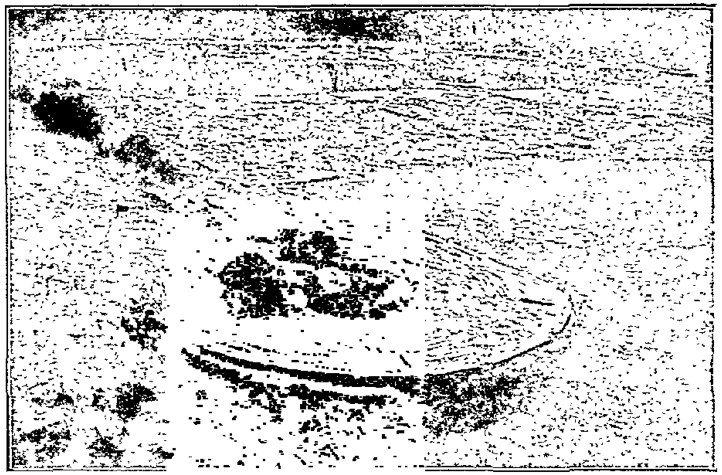
(*d*) PAHARPUR, RAJSHAHI DISTRICT. GENERAL VIEW OF EXCAVATED GHAT FROM N. W.



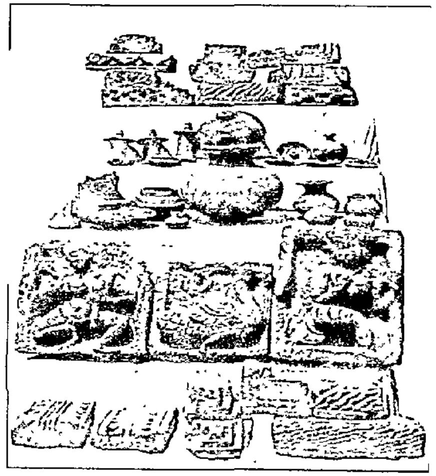
(*a*) PAHARPUR, RAJSHAHI DISTRICT. PORTION OF THE WESTERN RAMPART SHOWING THE BUTTRESS WALL.



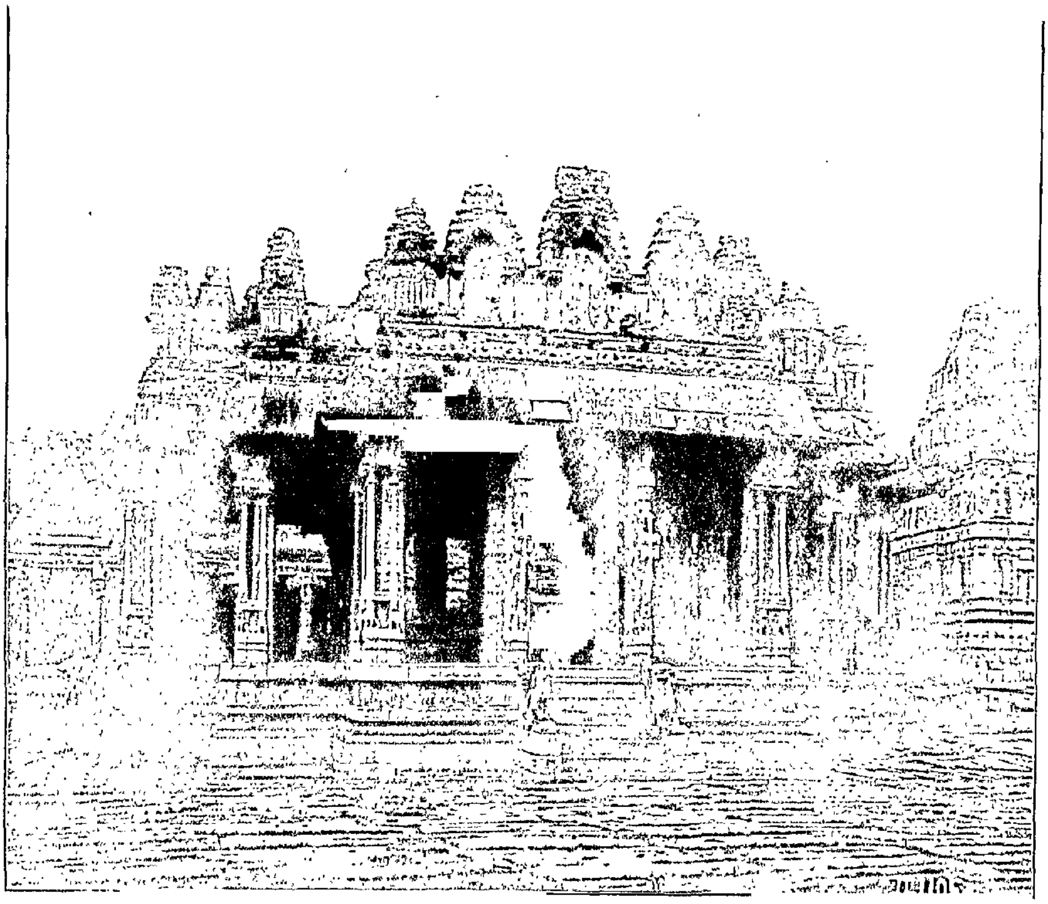
(*c*) IMAGE OF CHANDI IN BABU SASHIBHUSAN PAUL'S COLLECTION, MAHESVARPASA, DISTRICT KHULNA.



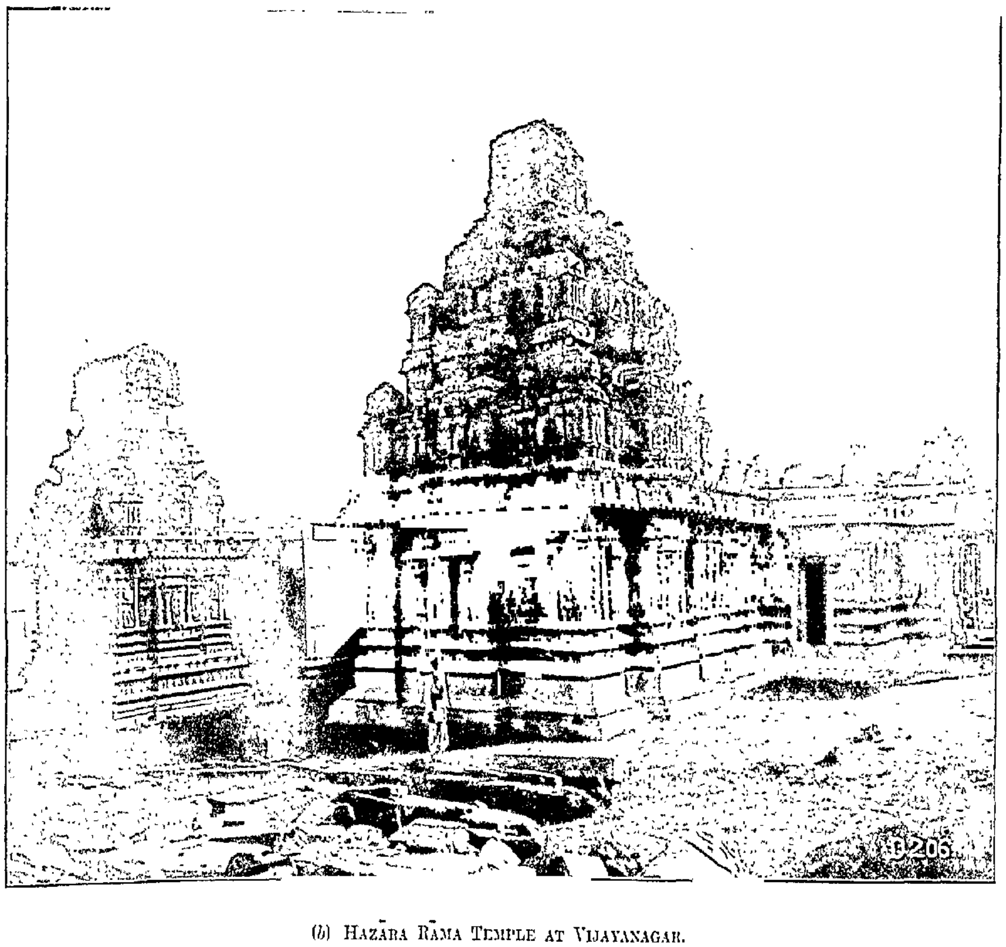
(*b*) PAHARPUR, RAJSHAHI DISTRICT. RING-WELL WITH PAVEMENT.



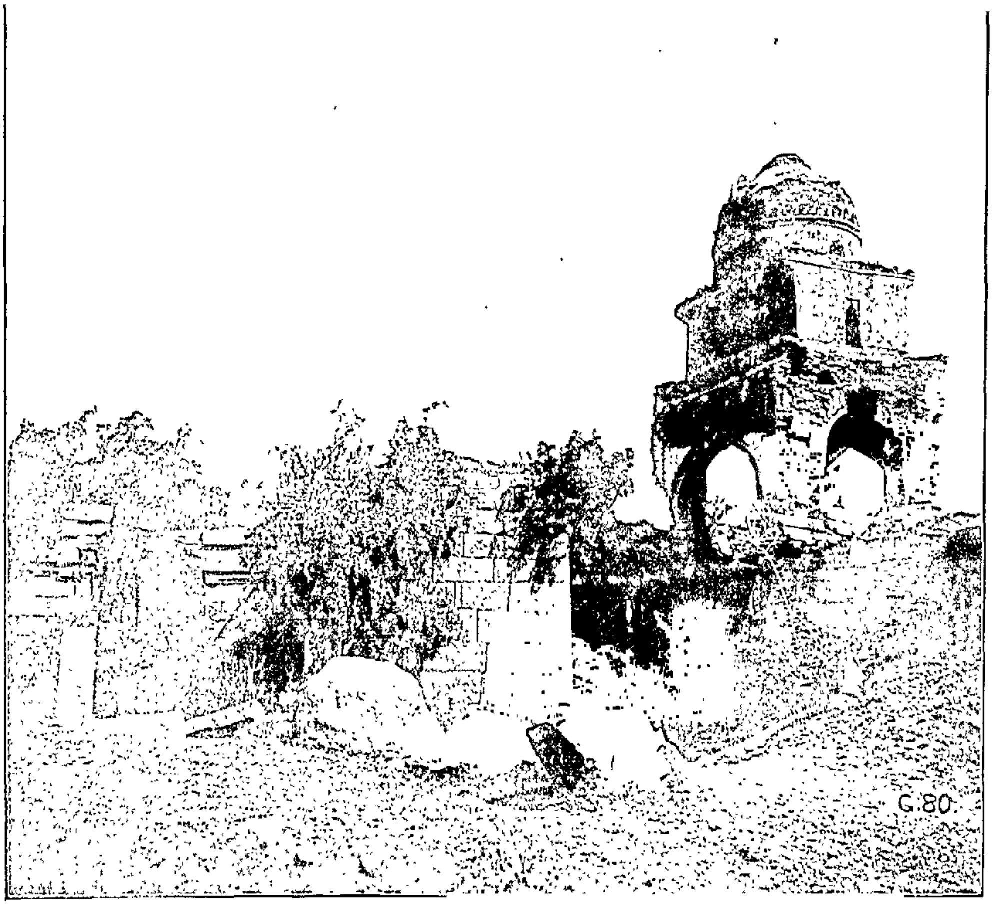
(*d*) PAHARPUR, RAJSHAHI DISTRICT. TERRACOTTA, POTTERY AND CARVED BRICKS FOUND FROM THE EXCAVATIONS.



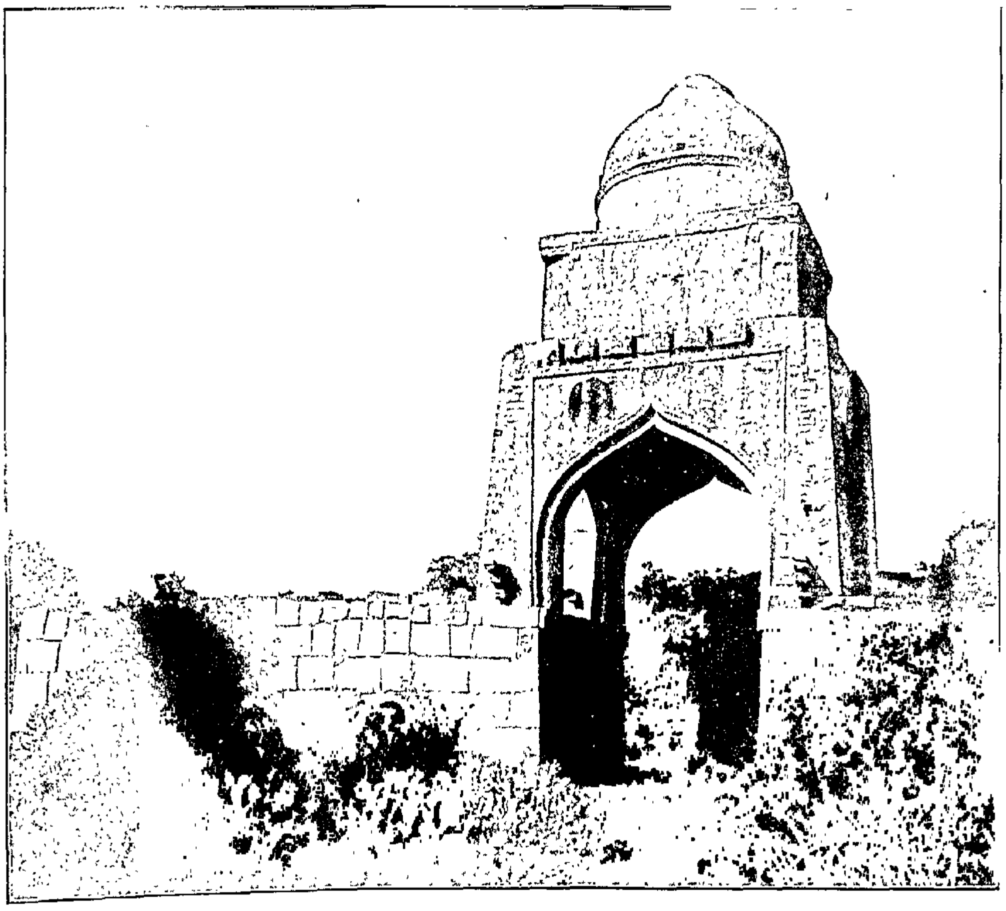
(a) Vitthala Temple at Vijayanagar, Kalyāna Mandapa.



(b) Hazāra Rāma Temple at Vijayanagar.

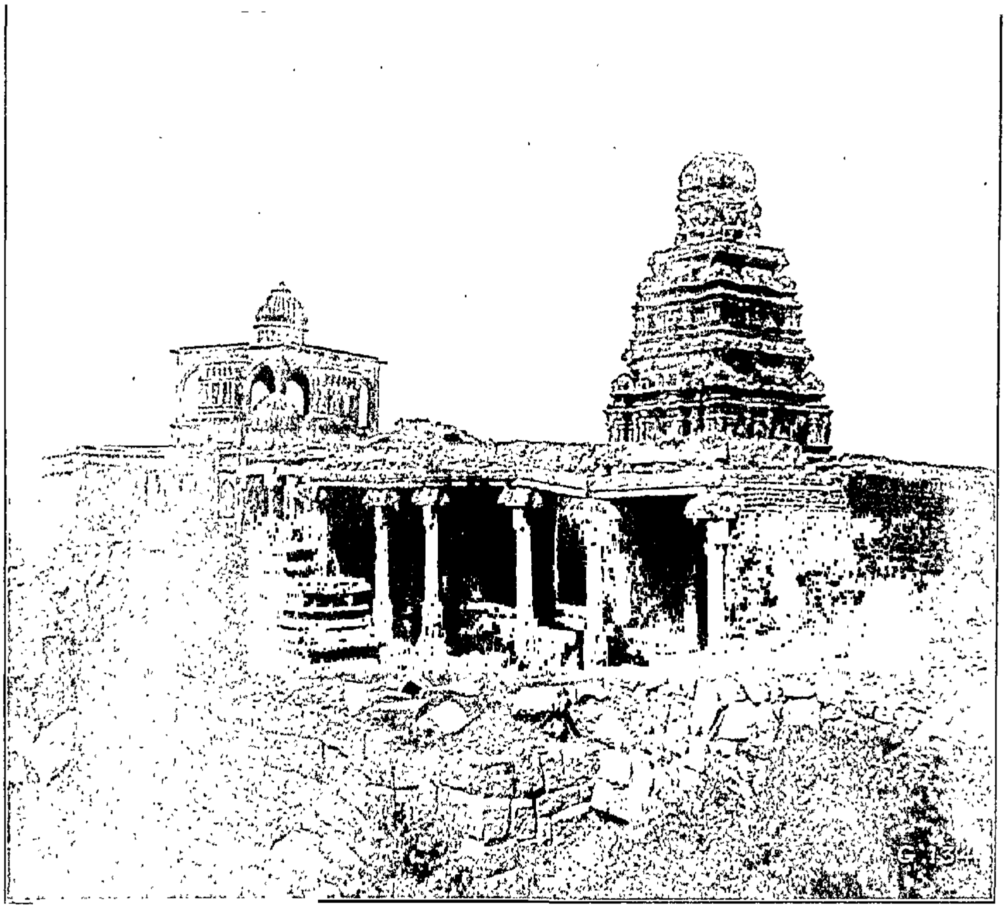


(*a*) DOMED GATEWAY AT VIJAYANAGAR, BEFORE REPAIRS.

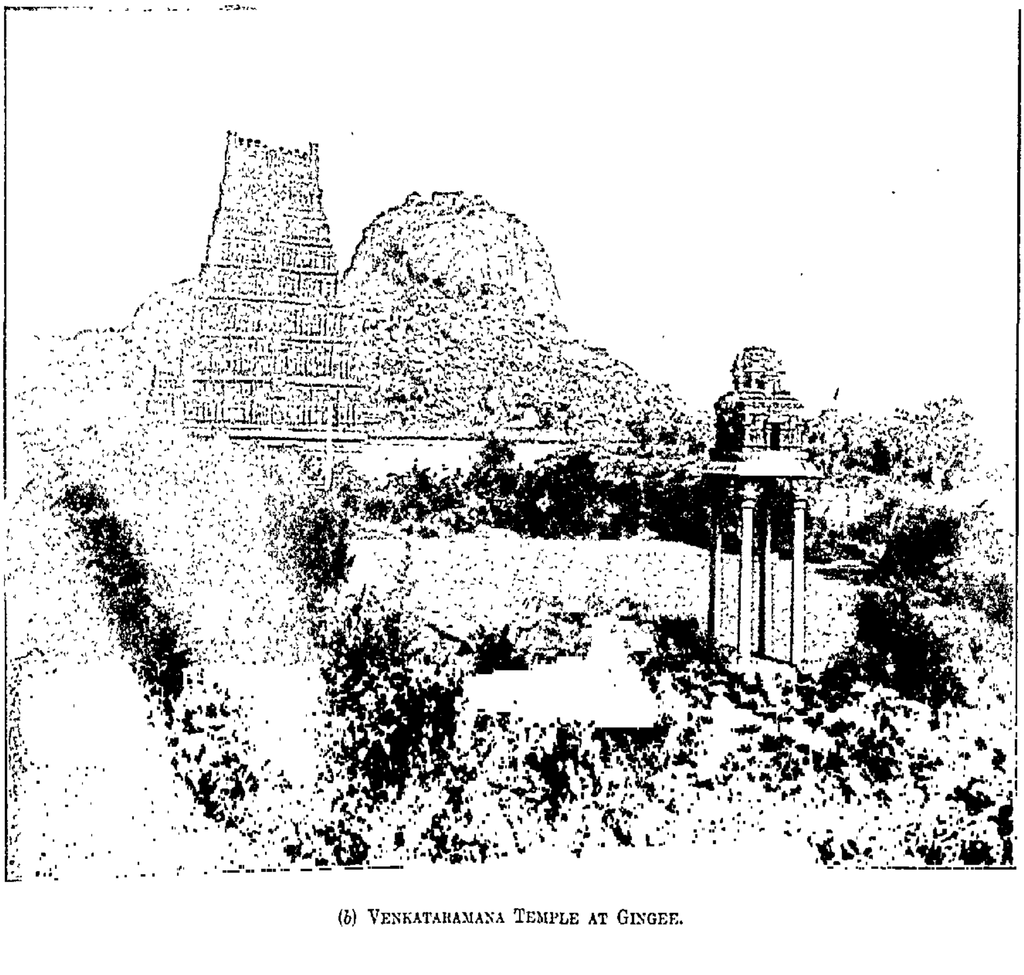


(*b*) DOMED GATEWAY AT VIJAYANAGAR, AFTER REPAIRS.

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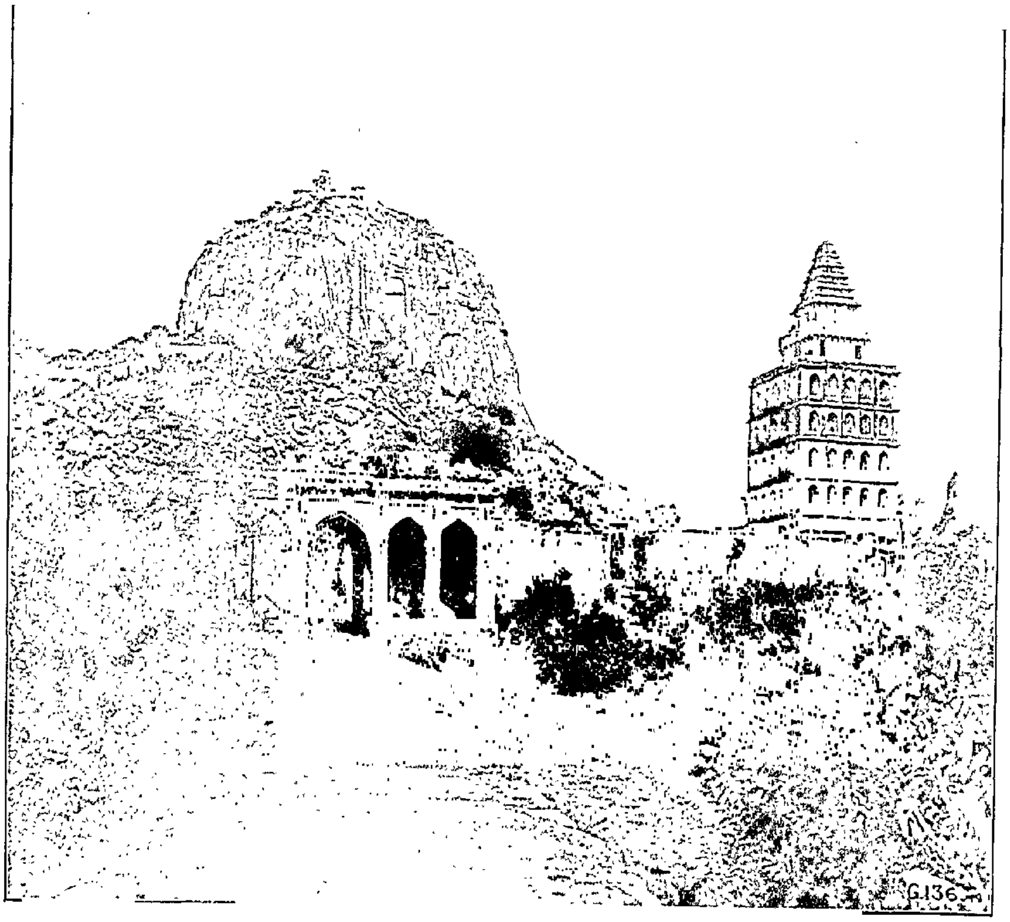


(a) AUDIENCE CHAMBER AND RANGANĀTHA TEMPLE ON KRISHNAGIRI AT GINGEE.

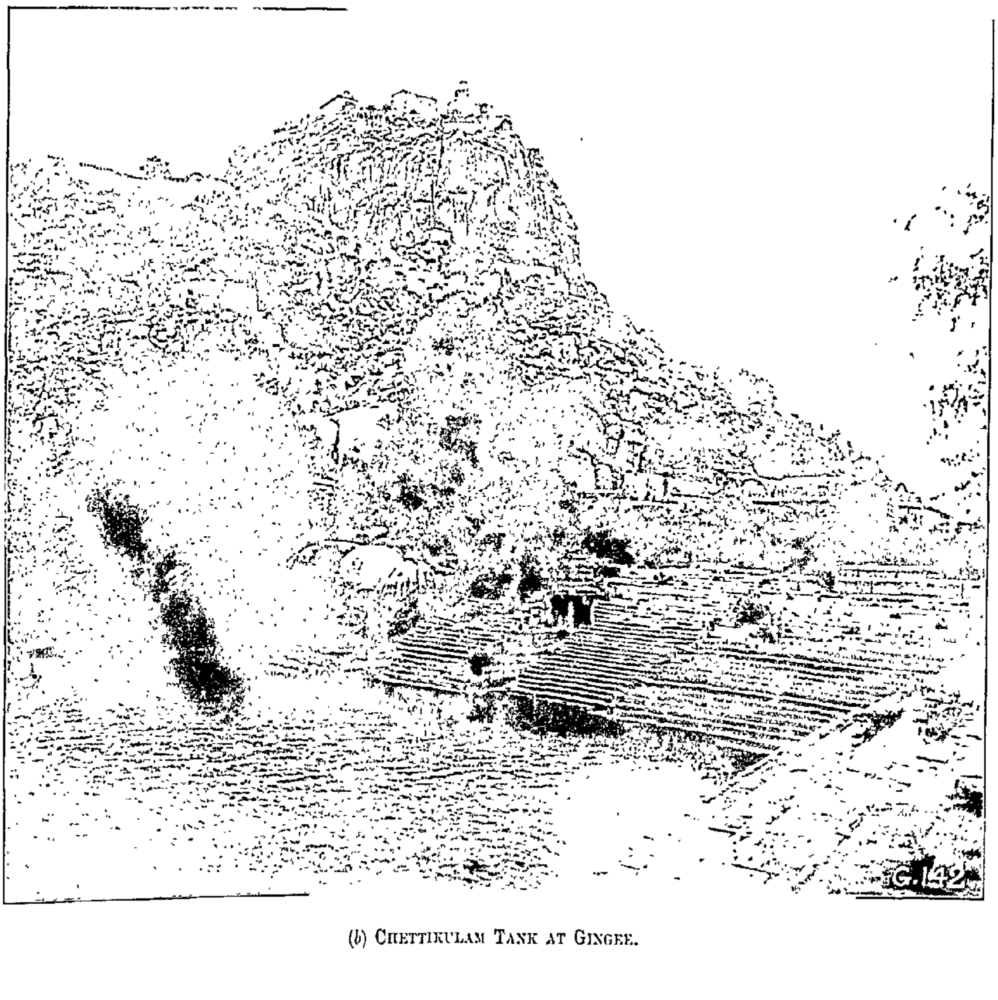


(b) VENKATARAMANA TEMPLE AT GINGEE.

Photo-engraved & printed at the Offices of the Survey of India, Calcutta, 1924.

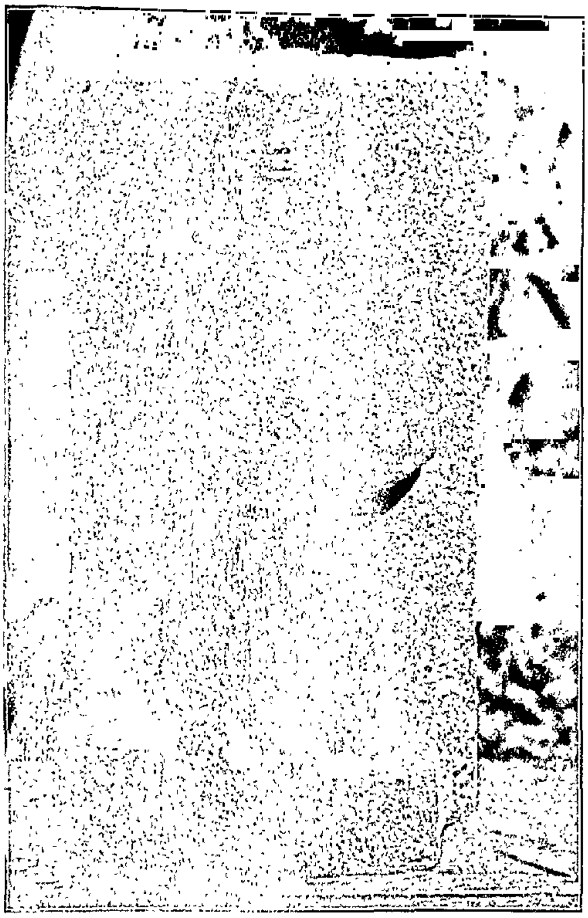


(*a*) RAJAGIRI AND THE KALYĀNA MAHAL AT GINGEE.



(*b*) CHETTIKULAM TANK AT GINGEE.

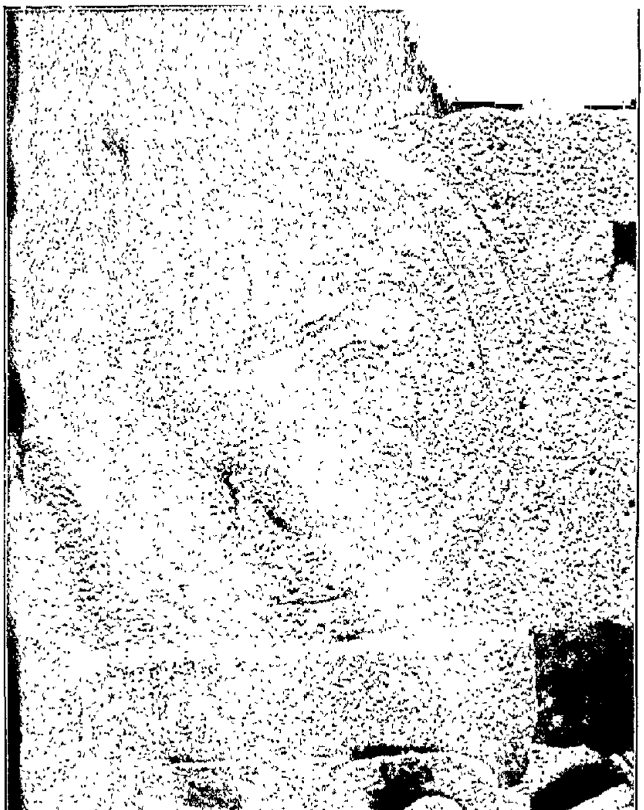
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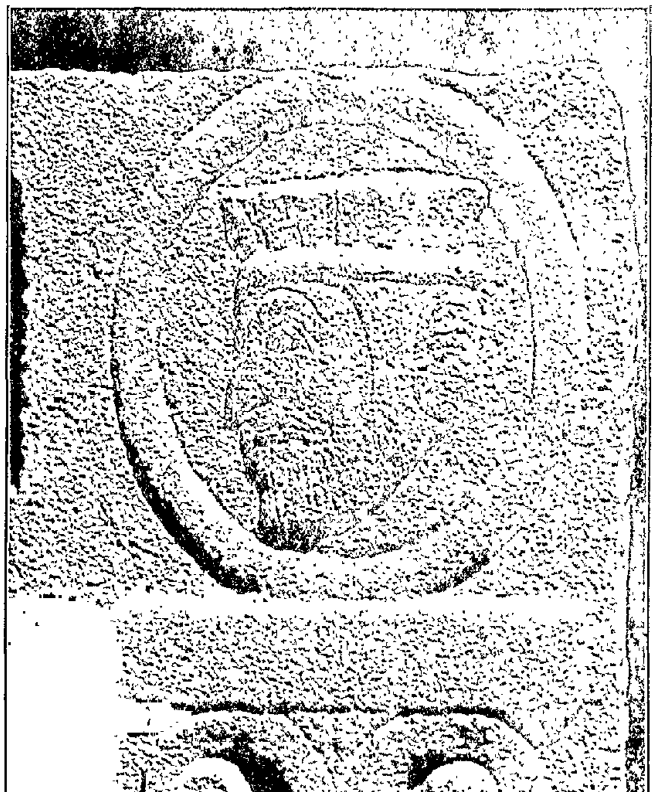
(a)



(b)



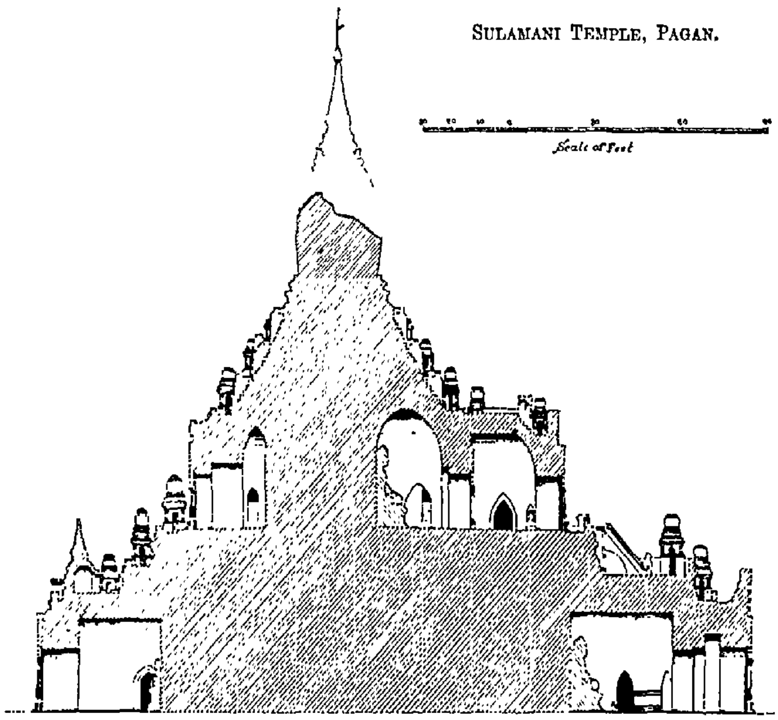
(c)



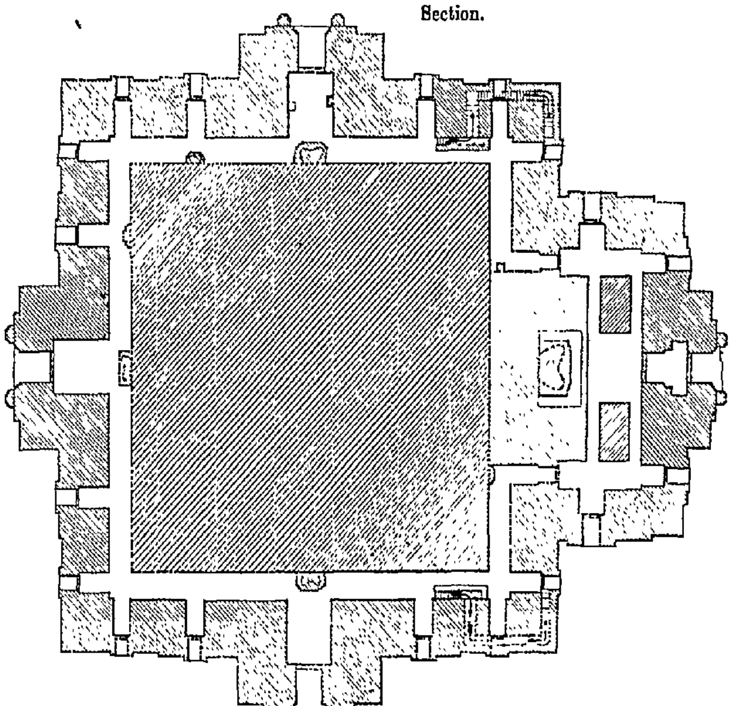
(d)

(a) TO (d) SCULPTURES IN THE BISHOP'S MUSEUM AT ST. THOMÉ.

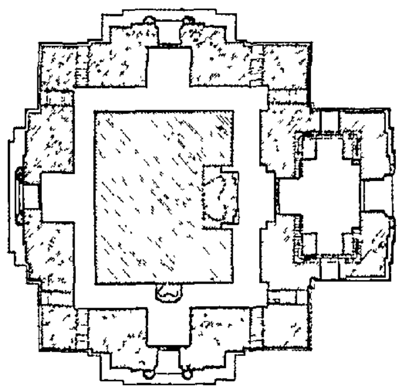
Sulamani Temple, Pagan.



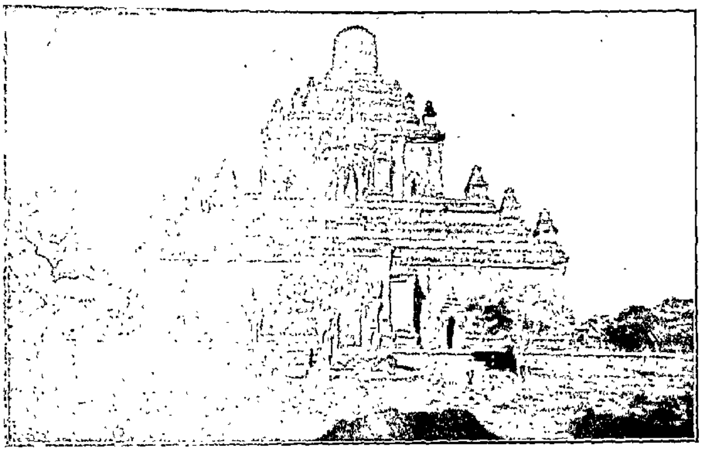
Section.



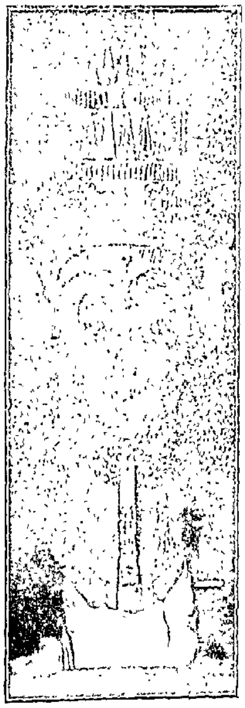
Ground plan.



Plan of upper storey.



(a) SULAMANI TEMPLE, PAGAN, AFTER REPAIRS.



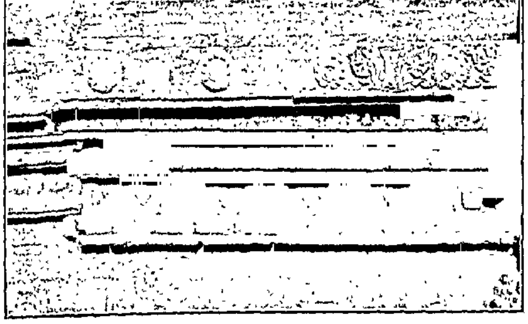
(b) TAGAUNG *Nat*.



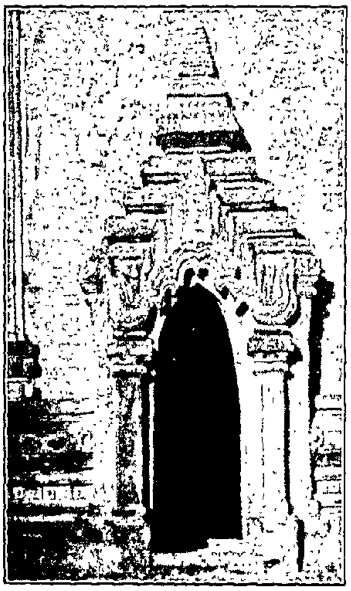
(d) STONE IMAGE FOUND AT PAGAN.



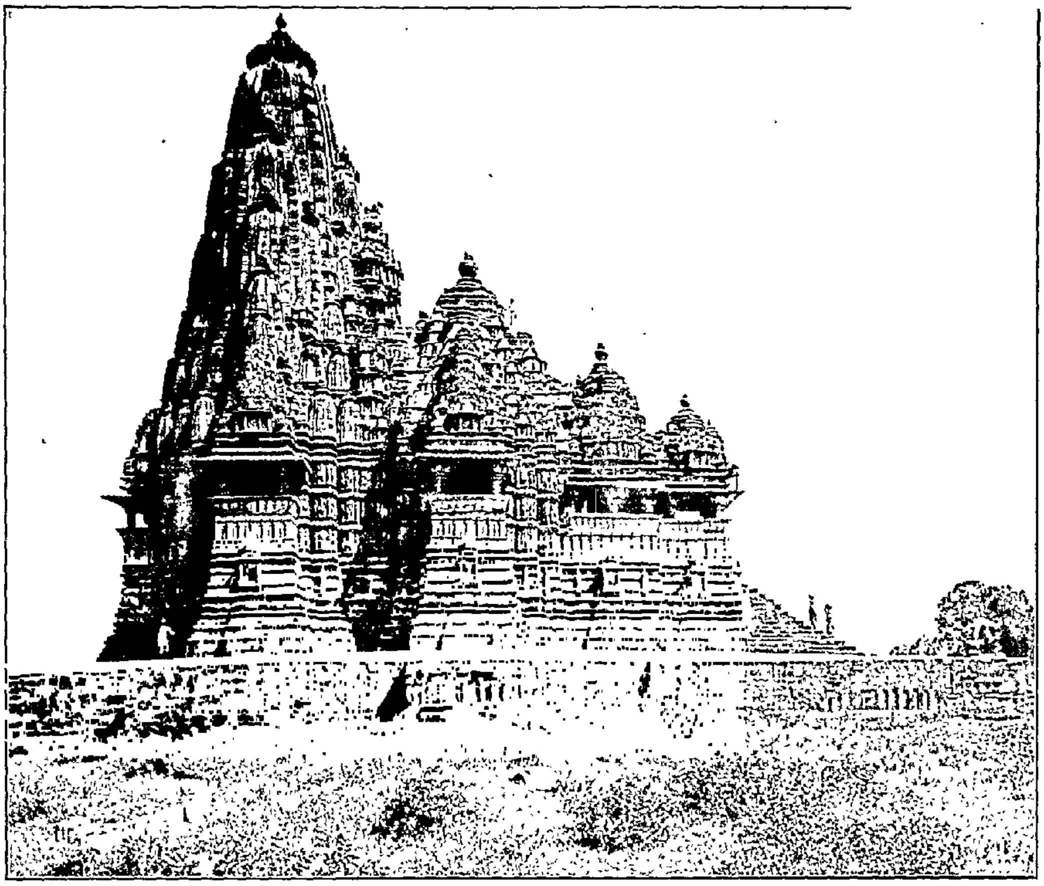
(c) SURYA FOUND AT MROHAUNG, ARAKAN.



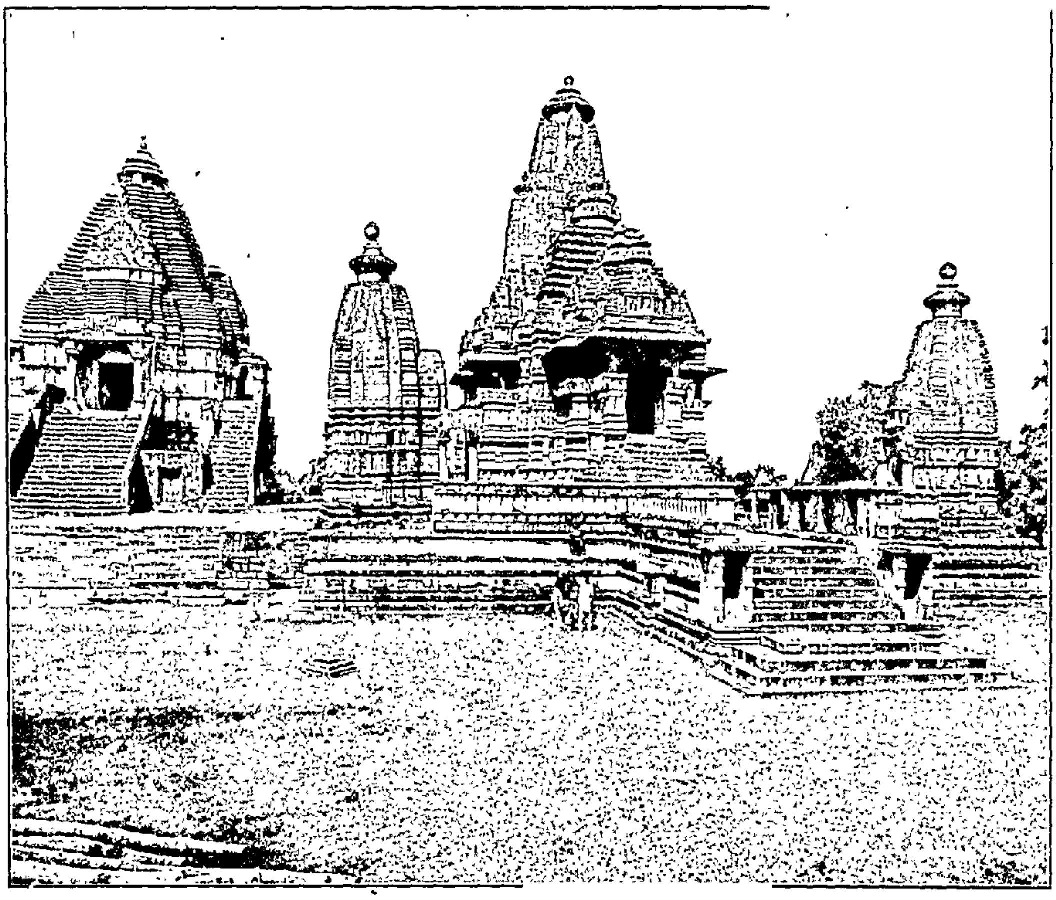
(e) SULAMANI TEMPLE, PAGAN. PART OF THE PLINTH WALL SHOWING THE GLAZED PLAQUES.



(f) SULAMANI TEMPLE, PAGAN, WINDOW AT THE GROUND LEVEL.

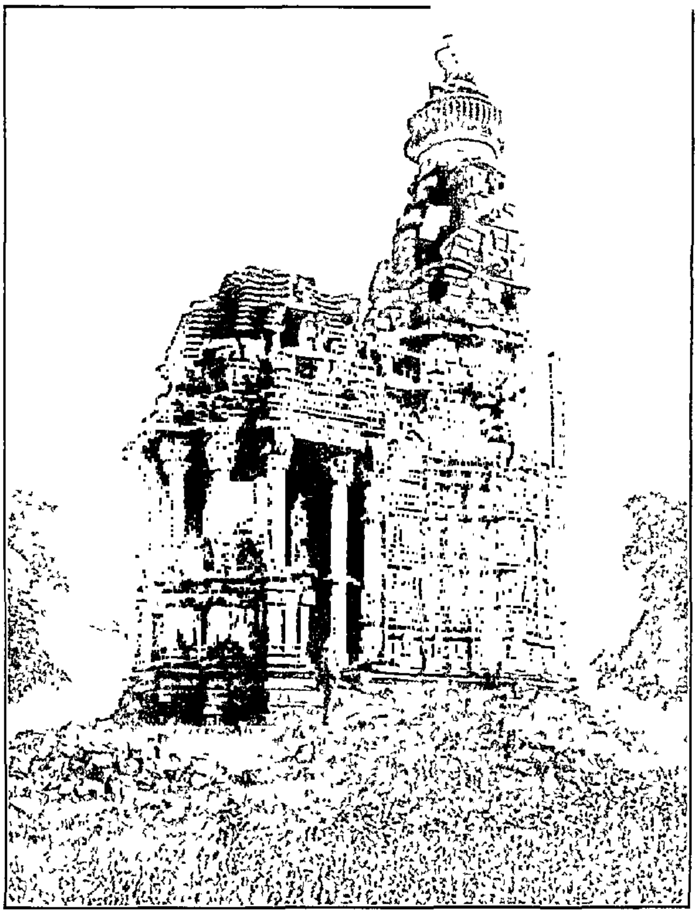


(a) KHAJURAHO, CHHATTARPUR STATE, KANDARYA MAHADEO TEMPLE, GENERAL VIEW FROM SOUTH.

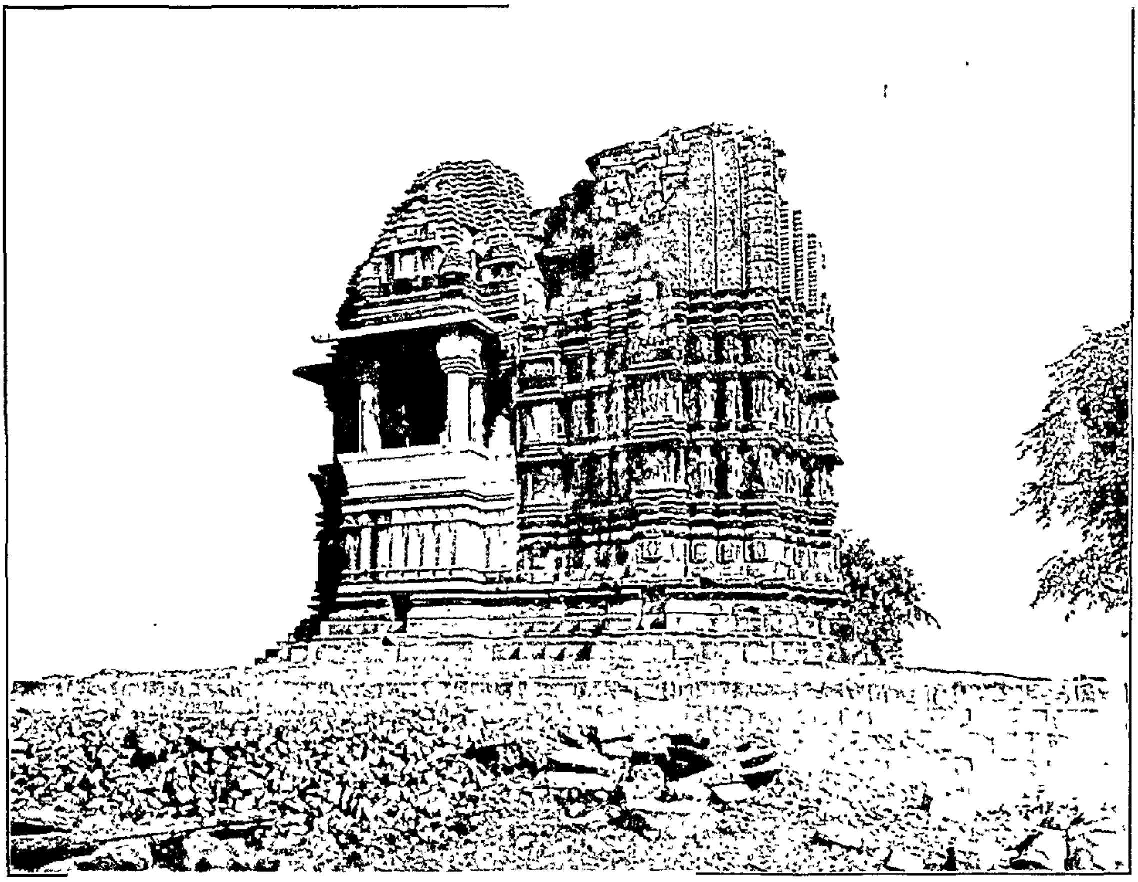


(b) KHAJURAHO, CHHATTARPUR STATE, LAKSHMANJI TEMPLE, GENERAL VIEW FROM S.E.

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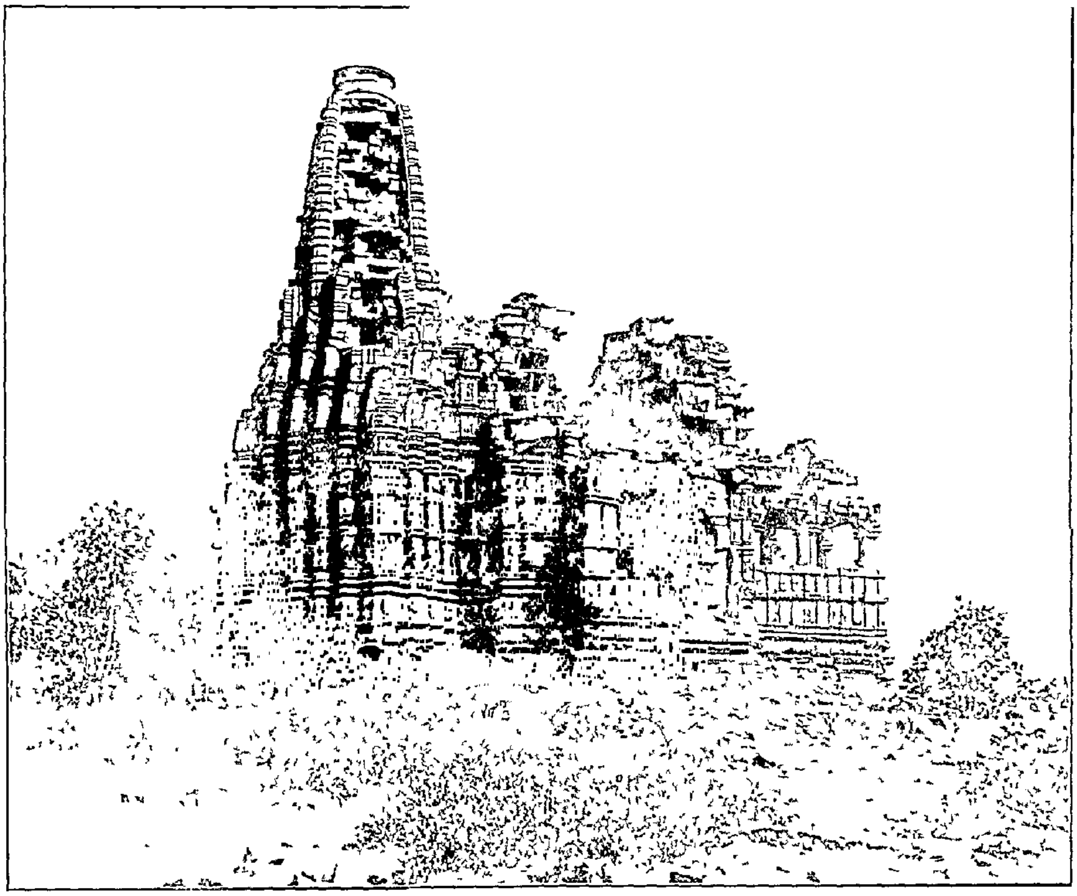


(a) KHAJURAHO, CHHATTARPUR STATE, JATKARI TEMPLE, BEFORE CONSERVATION.

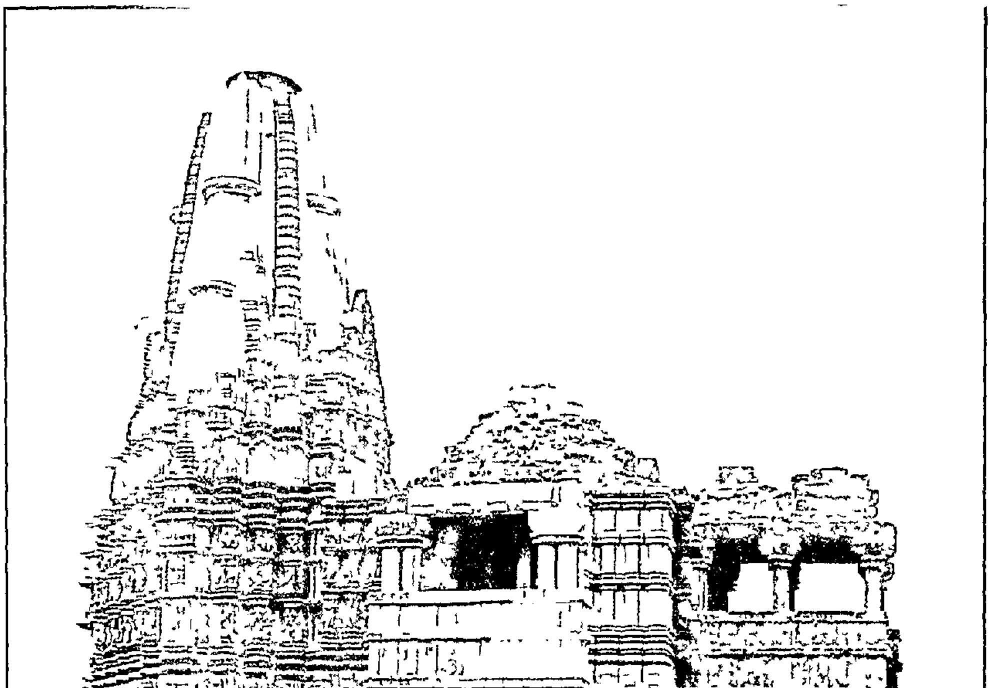


(b) KHAJURAHO, CHHATTARPUR STATE, JATKARI TEMPLE, AFTER CONSERVATION.

Photo-engraved & printed at the Offices of the Survey of India, Calcutta 1921



(a) KHAJURAHO, CHHATTARPUR STATE, DULADEO TEMPLE, BEFORE CONSERVATION



(b) KHAJURAHO, CHHATTARPUR STATE, DULADEO TEMPLE, AFTER CONSERVATION.

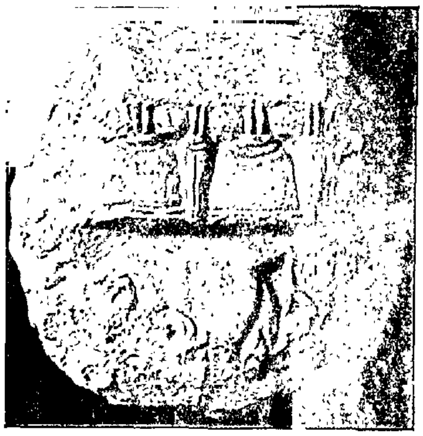
Photo-engraved & printed at the Offices of the Survey of India, Calcutta, 1924



(a) FRAGMENT OF ARCHITRAVE FROM BHARHUT.



(b) FRAGMENT OF COPING STONE FROM MATHURA, OBVERSE.



(c) FRAGMENT OF COPING STONE FROM MATHURA, REVERSE.



(d) BACCHANALIAN GROUP FROM MATHURA, OBVERSE.



(e) BACCHANALIAN GROUP FROM MATHURA, REVERSE.

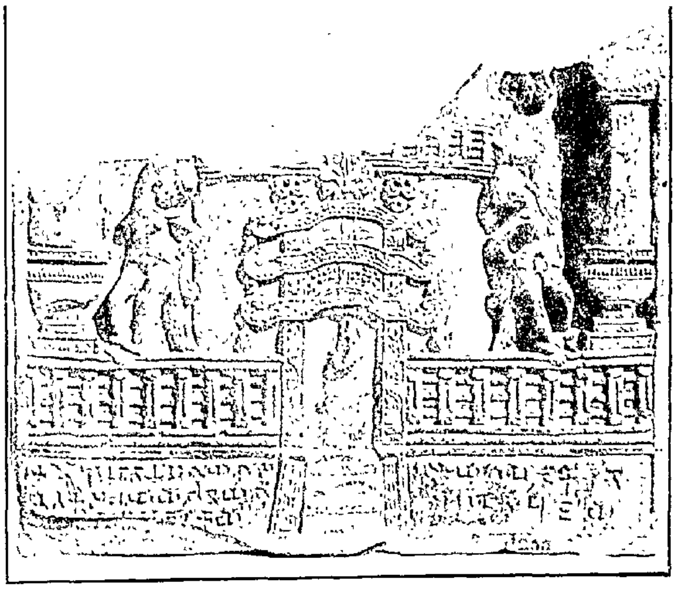
Photo-engraved & printed at the Offices of the Survey of India, Calcutta, 1924



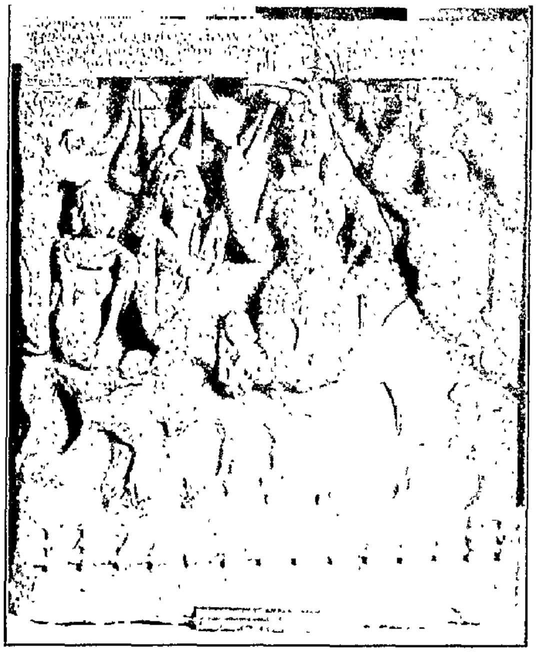
(*a*) SEATED BUDDHA FROM BODH-GAYA.



(*b*) GROUP FROM MATHURA.

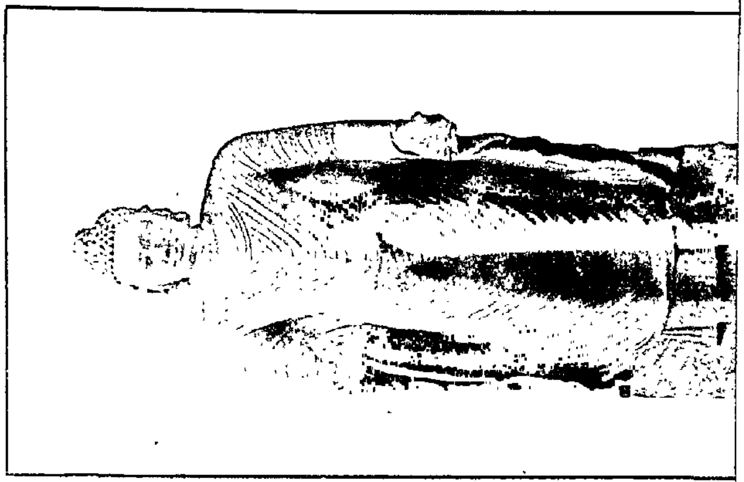


(*c*) VOTIVE TABLET FROM MATHURA (LUCKNOW MUSEUM).



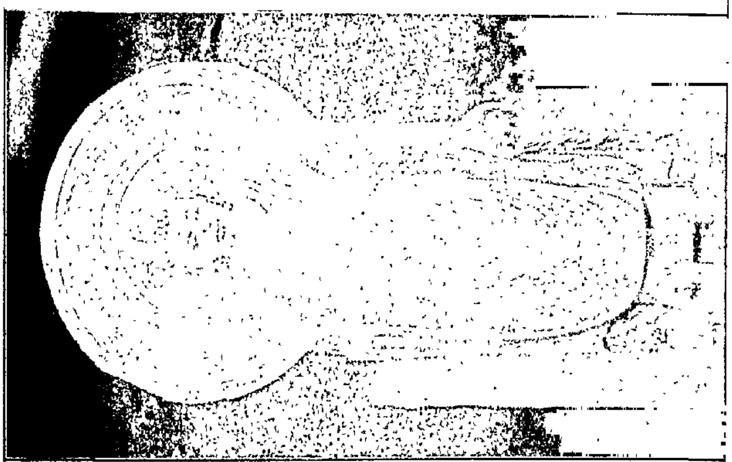
(*d*) IMAGE OF ĀRYAVATĪ FROM MATHURA (LUCKNOW MUSEUM).

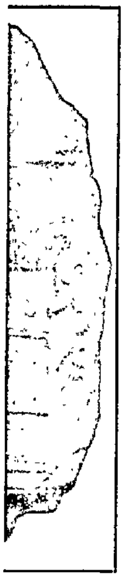
Photo-engraved & printed at the Offices of the Survey of India, Calcutta.



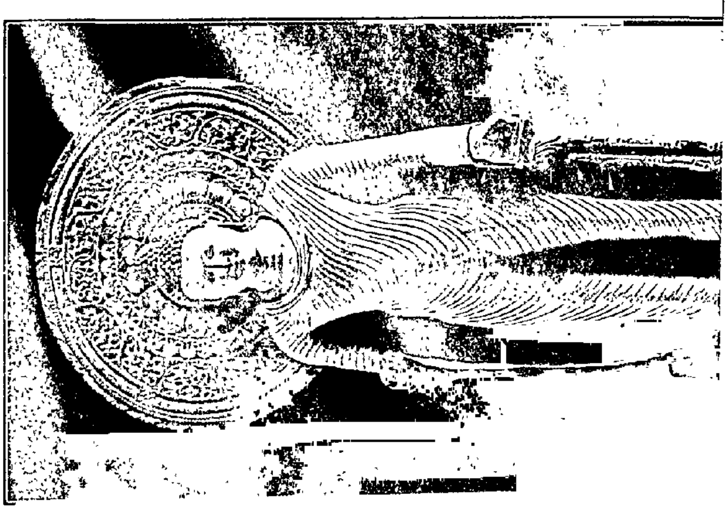


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THURA.



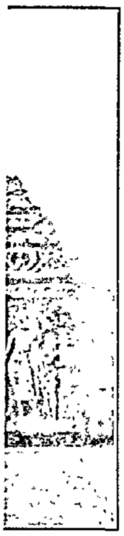


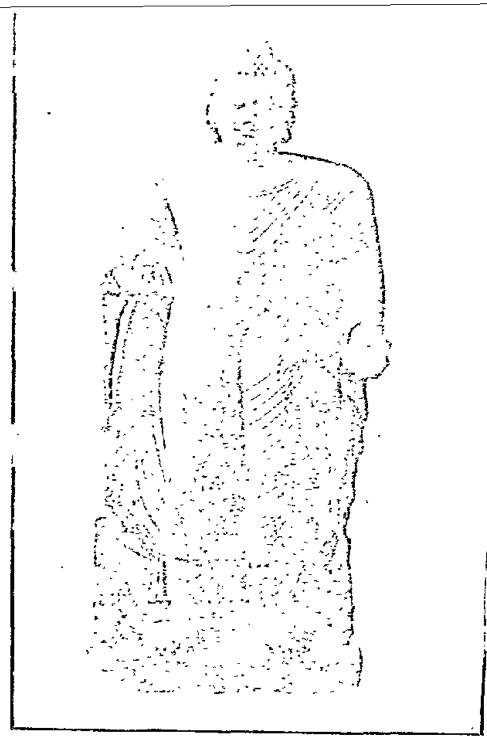
PLATE XXXIX.



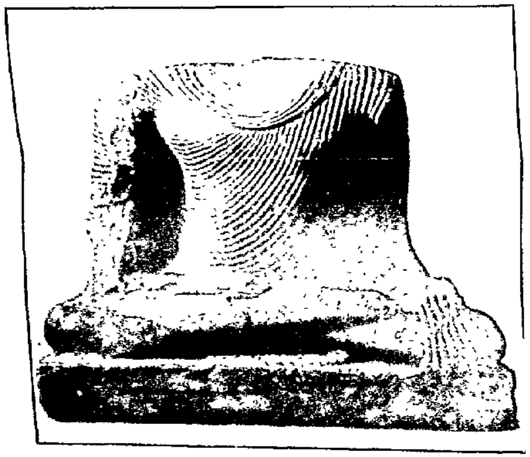
(a) STANDING BUDDHA WITH A HALO FROM MATHURA.



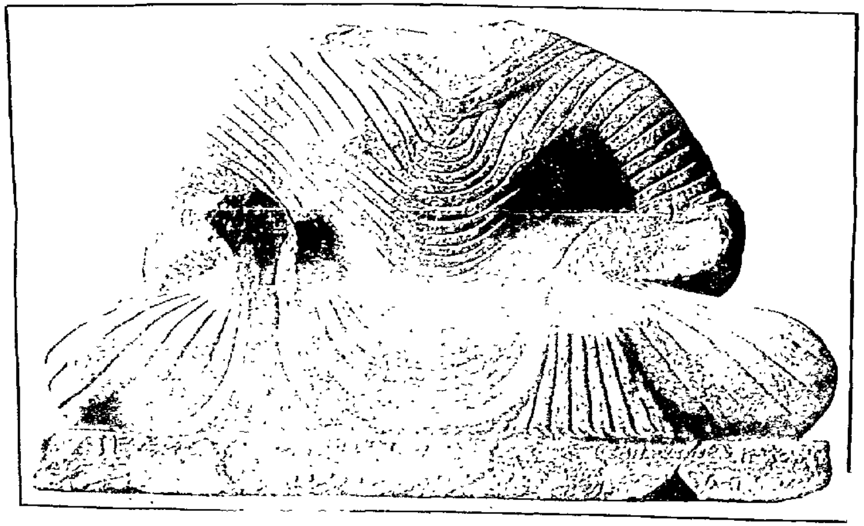
(b) STANDING BUDDHA WITH A HALO (MATHURA MUSEUM).



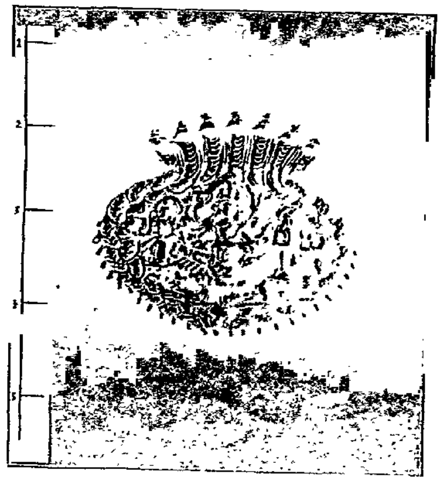
(c) STANDING BUDDHA WITHOUT A HALO FROM MATHURA.



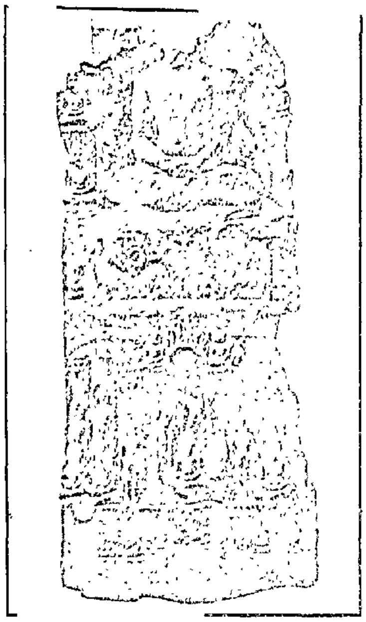
(d) SEATED BUDDHA FROM MATHURA.



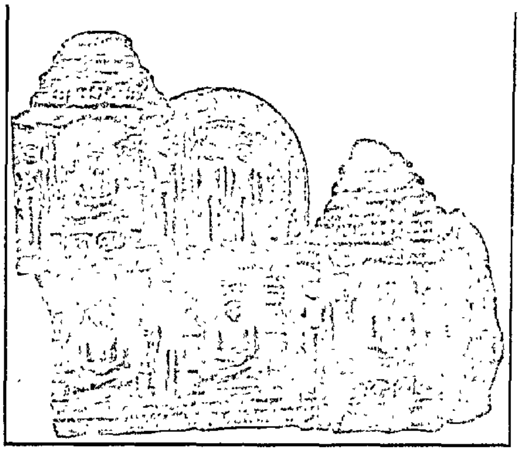
...ED BUDDHA FROM MATHURA.



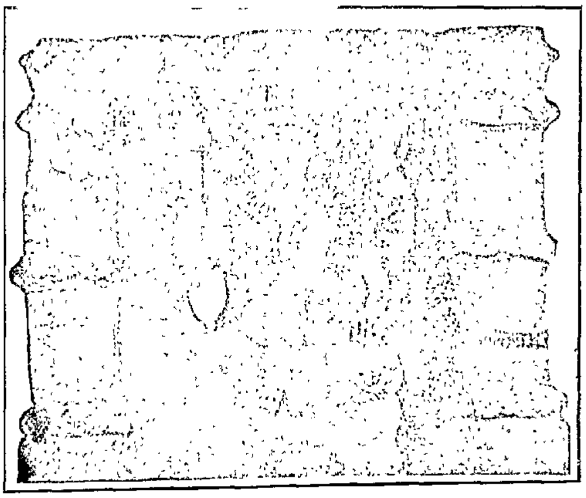
(f) GOLD...



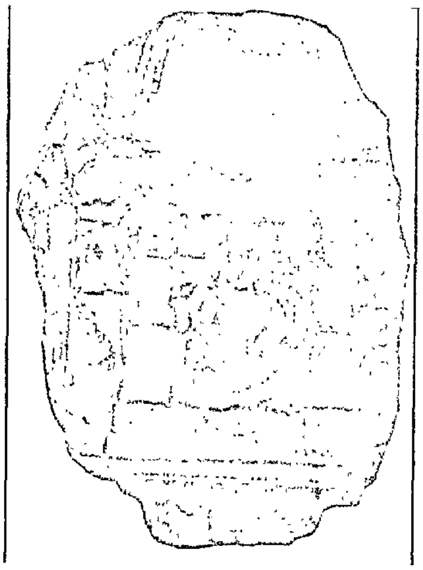
(a) JAIN STELE FROM MATHURA.



(b) FRAGMENT OF A DOOR LINTEL WITH FIGURES OF JAIN TIRTHANKARAS FROM MATHURA.



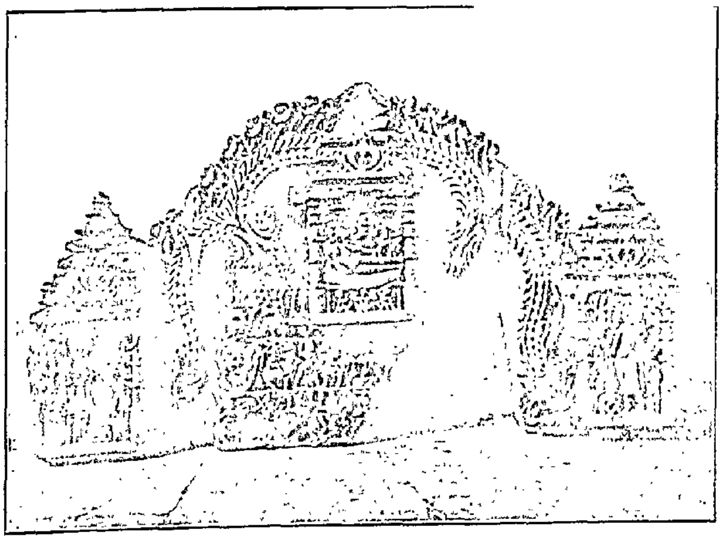
(c) IMAGE OF VISHNU FROM MAIHAR.



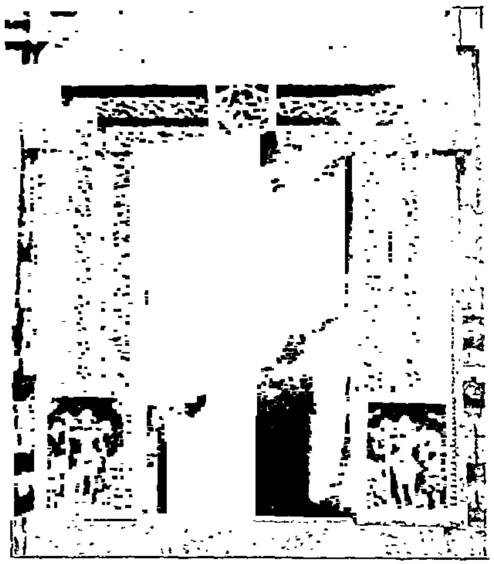
(d) SEATED BUDDHA FROM MATHURA.



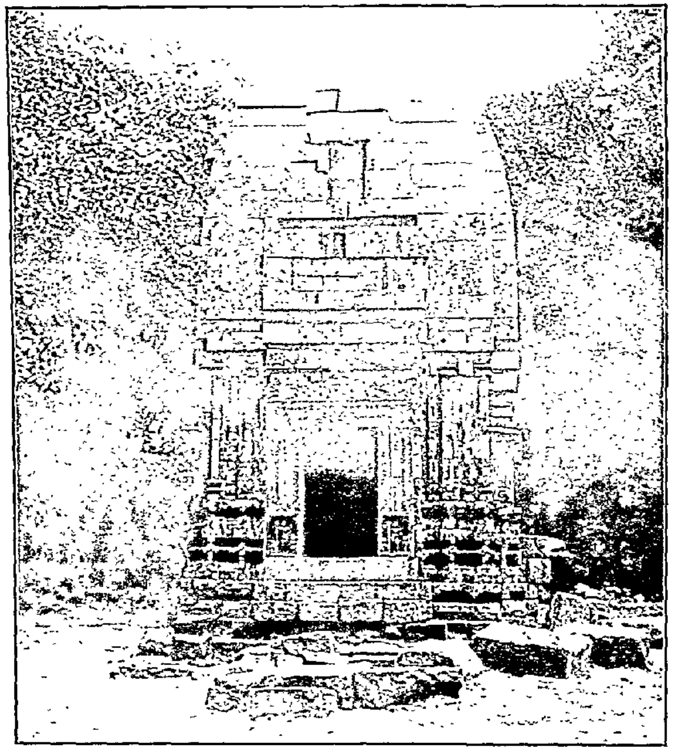
(e) CAST FROM A MOULD OF MAHISHAMARDINI FROM PESHAWAR.



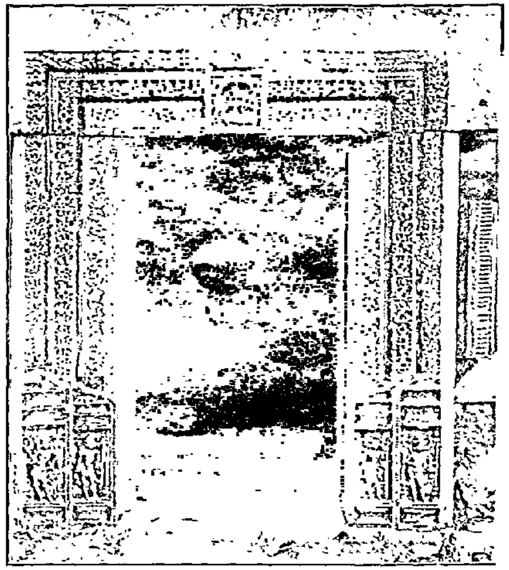
(f) DOOR LINTEL FROM SARNATH.



(a) Doorway of Chandraśekhara temple at Khiching.

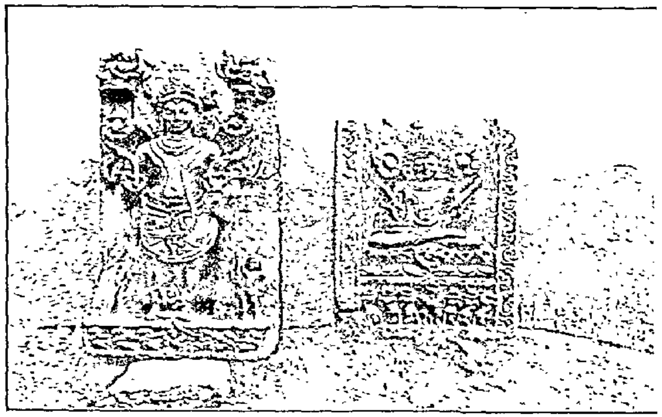


(b) Temple of Chandraśekhara temple at Khiching.

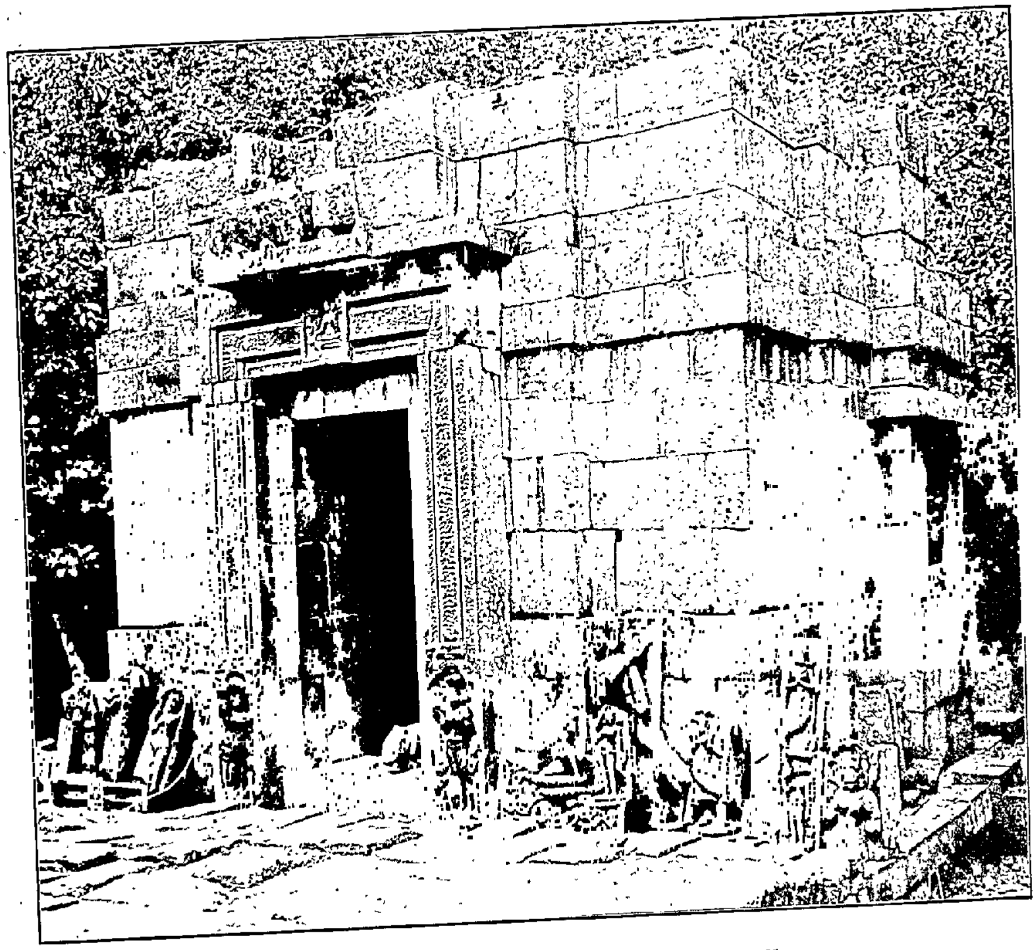


(c) Doorway of Nilakanthesvara temple, Khiching.









(a) KHANDIYA DEUL TEMPLE, KHINCHING, MAYURBHANJ.



(b) A GROUP OF SCULPTURES AT KHINCHING.

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